

Epigenetic Solutions



A Systematic Pipeline Is Here

DNA Modification








Protein-DNA Interaction

Methylation

Acetylation & Deacetylation

Gene Expression & Silencing

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Orders in the USA

EPIGENTEK offers several ordering methods for making a convenient purchase:

Online: www.Epigentek.com
Phone: 1 (718) 484-3990
Fax: 1 (718) 484-3956
E-mail: sales@epigentek.com

The following customer information must be included in all orders:

1. Valid P.O. or credit card number
2. Billing address
3. Shipping address
4. Name and contact info of purchaser
5. Name and contact info of end user
6. Catalog number and product name
7. Quantity and size of product

All orders ship within 1-2 business days via Federal Express or UPS unless otherwise indicated.

Non-USA Orders*

To place an order or obtain a price quote outside of the United States, please contact your regional distributor.

No distributor in your region? Just e-mail info@epigentek.com and we'll gladly assist you.

DNA Modification

Methylamp™ DNA Modification Kit

The *Methylamp™ DNA Modification Kit* is a complete set of essential components which enables the experimenter to perform DNA methylation analysis using Epigentek's uniquely simplified and streamlined bisulfite method. The entire procedure can be completed within a mere 1 hour and 55 minutes and produces far superior results than any competitor kits. The *Methylamp™ DNA Modification Kit* is suitable for MS-PCR, real time MS-PCR, methylation sequencing, and pyrosequencing, as well as methylation microarray.

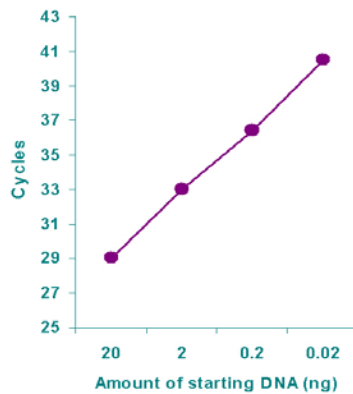


Fig. 1
The different amounts of DNA isolated from a serum sample were chemically modified using the *Methylamp™ DNA Modification Kit*. Real time PCR was performed by using a pair of primers and a probe designed to amplify both methylated and unmethylated alleles of β -actin.

PRINCIPLE AND PROCEDURE

The *Methylamp™ DNA Modification Kit* contains all reagents required for bisulfite conversion on a DNA sample. DNA is chemically denatured to allow bisulfite reagent to react specifically with single-stranded DNA, thereby deaminating cytosine and creating a uracil residue. The unique DNA protection reagents contained in the modification buffer can prevent the chemical and thermophilic degradation of DNA in the bisulfite treatment. The non-toxic modified DNA capture buffer enables DNA to bind tightly to the column filter, thus clean DNA can be carried out on the column to effectively remove residual sodium bisulfite and salts. Modified DNA can then be eluted and stably stored at -20°C for up to 2 months.

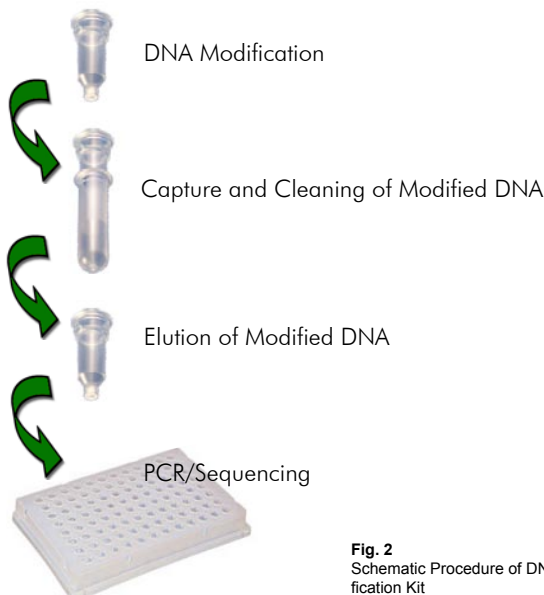


Fig. 2
Schematic Procedure of DNA Modification Kit

Why Choose the Methylamp™ DNA Modification Kit?

- » The fastest procedure available on the market, which can be completed in under 2 hours with consistent reaction conditions.
- » Completely converts unmethylated cytosine into uracil: modified DNA > 99.98%.
- » The lowest degradation of DNA in the modification process: more than 90% of DNA loss can be prevented.
- » The lowest requirement of starting DNA for modification: only 50 pg or 20 cells.
- » Extremely simple, reliable, and consistent modification conditions.

References

Li, Kay Ka Wai et al. (Dec 2006). EMP3 overexpression is associated with oligodendroglial tumors retaining chromosome arms 1p and 19q. *International Journal of Cancer* 120(4): 947-50.

Tong, Yu K et al. (Oct 2006). Noninvasive prenatal detection of fetal trisomy 18 by epigenetic allelic ratio analysis in maternal plasma: Theoretical and empirical considerations. *Clin. Chem.* 52(12): 2182-3.

Related Modification Kits

Methylamp™ One-Step DNA Modification Kit

The *Methylamp™ One-Step DNA Modification Kit* is an improved version of the *Methylamp™ DNA Modification Kit*, which uses a heating process to eliminate the chemical DNA denaturing step in the DNA modification process and enables cytosine conversion to be more simple and convenient.

Methylamp™ Coupled DNA Isolation & Modification Kit

Includes all reagents required for successful DNA isolation and bisulfite conversion. DNA is isolated and chemically denatured to allow bisulfite reagent react specifically with single-stranded DNA, thereby deaminating cytosine and creating a uracil residue.

Methylamp™-96 DNA Modification Kit

Includes all reagents for successful bisulfite conversion on a DNA sample in high throughput/96-well filter format.

Methylamp™ Whole Cell Bisulfite Modification Kit

Includes all reagents required for successful bisulfite conversion directly on a cell or tissue sample. DNA can be isolated from cells or tissues, denatured and bisulfite modified simultaneously in the same tube with the specific reaction buffer under the thermodynamic condition.

Ordering Information*

Catalog #	Description	Size
P-1001-1	<i>Methylamp™ DNA Modification Kit</i>	40 samples
P-1001-2	<i>Methylamp™ DNA Modification Kit</i>	80 samples
P-1002	<i>Methylamp™ Coupled DNA Isolation & Mod. Kit</i>	40 samples
P-1008-1	<i>Methylamp™-96 DNA Modification Kit</i>	96 samples
P-1008-2	<i>Methylamp™-96 DNA Modification Kit</i>	192 samples
P-1010-1	<i>Methylamp™ One-Step DNA Modification Kit</i>	40 samples
P-1010-2	<i>Methylamp™ One-Step DNA Modification Kit</i>	80 samples
P-1011-1	<i>Methylamp™ Universal Methylated DNA Kit</i>	10 modif.
P-1011-2	<i>Methylamp™ Universal Methylated DNA Kit</i>	20 modif.
P-1016-40	<i>Methylamp™ Whole Cell Bisulfite Modification Kit</i>	40 samples
P-1016-80	<i>Methylamp™ Whole Cell Bisulfite Modification Kit</i>	80 samples

DNA Methylation Quantification

Methylamp™ Global DNA Methylation Quantification Kit

The *Methylamp™ Global DNA Methylation Quantification Kit* is a complete set of essential components which enables the experimenter to quantify global DNA methylation through an ELISA-like reaction using Epigentek's uniquely simplified and streamlined procedure. The entire procedure can be completed within only 4 hours in either manual or high throughput analysis. The *Methylamp™ Global DNA Methylation Quantification Kit* is suitable for detecting global DNA methylation status using genomic DNA isolated from variety of cultured cells, fresh and frozen tissue, paraffin-embedded tissue, plasma/serum sample, and body fluid sample, etc.

PRINCIPLE AND PROCEDURE

The *Methylamp™ Global DNA Methylation Quantification Kit* contains all reagents required for quantification of global DNA methylation. In this assay, DNA is immobilized to the strip well specifically treated to have high affinity to the DNA. The methylated fraction of DNA can be recognized by 5-methylcytosine antibody and quantified through an ELISA-like reaction. The amount of methylated DNA is proportional to the OD intensity.

FitAmp™ Circulating DNA Quantification Kit

The *FitAmp™ Circulating DNA Quantification Kit* applies our DNA isolation buffer to plasma or serum to fluorescently quantify circulating DNA in a rapid and convenient process.

Methylamp™ Methylated DNA Capture Kit

The *Methylamp™ Methylated DNA Capture Kit* conveniently captures methylated DNA from a DNA sample. This plate-based enrichment method for methylated DNA is suitable for combining the specificity of enriched methylated DNA with qualitative and quantitative PCR, and southern blot as well as DNA microarray.

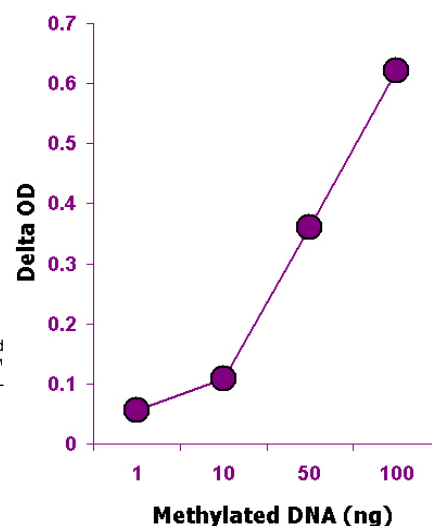


Fig. 3
Quantification of Methylated DNA using the *Methylamp™ Global DNA Methylation Quantification Kit*.

Catalog #	Description	Size
P-1012-1	FitAmp™ Circulating DNA Quantification Kit	48 samples
P-1012-2	FitAmp™ Circulating DNA Quantification Kit	96 samples
P-1014-48	Methylamp™ Global DNA Methylation Quantification Kit	48 samples
P-1014-96	Methylamp™ Global DNA Methylation Quantification Kit	96 samples
P-1015-24	Methylamp™ Methylated DNA Capture Kit	24 samples
P-1015-48	Methylamp™ Methylated DNA Capture Kit	48 samples

DNA Isolation & Other Products

FitAmp™ General Tissue Section DNA Isolation Kit

Designed for DNA isolation in any targeted microscopic tissue area on a slide containing as low as 1 ng of DNA within 2 hours. Non-toxic reagents and no phenol chloroform.

FitAmp™ Plasma/Serum DNA Isolation Kit

Designed for DNA isolation from plasma, serum, and body fluids containing as low as 0.1 ng of DNA within only 12 minutes. Non-toxic reagents and no phenol chloroform.

FitAmp™ Gel DNA Isolation Kit

Designed for isolating DNA from low melting point agarose gel within only 15 minutes. No chaotropic or irritant reagents.

FitAmp™ Paraffin Tissue Section DNA Isolation Kit

Effectively isolates DNA from paraffin archives containing as low as 1 ng of DNA within 2 hours, depending on sample types. No deparaffinization necessary. Non-toxic reagents and no phenol chloroform.

FitAmp™ Urine DNA Isolation Kit

Effectively isolates DNA from urine containing as low as 1 ng of DNA within only 20 minutes. Non-toxic reagents and no phenol chloroform.

Catalog #	Description	Size
P-1003-1	FitAmp™ General Tissue Section DNA Isolation Kit	50 samples
P-1003-2	FitAmp™ General Tissue Section DNA Isolation Kit	100 samples
P-1004-1	FitAmp™ Plasma/Serum DNA Isolation Kit	50 samples
P-1004-2	FitAmp™ Plasma/Serum DNA Isolation Kit	100 samples
P-1007-1	FitAmp™ Gel DNA Isolation Kit	50 samples
P-1007-2	FitAmp™ Gel DNA Isolation Kit	100 samples
P-1009-1	FitAmp™ Paraffin Tissue Section DNA Isolation Kit	50 samples
P-1009-2	FitAmp™ Paraffin Tissue Section DNA Isolation Kit	100 samples
P-1017-50	FitAmp™ Urine DNA Isolation Kit	50 samples
P-1017-100	FitAmp™ Urine DNA Isolation Kit	100 samples
P-1005-1	TuMinute™ PCR Clean-Up Kit	50 samples
P-1005-2	TuMinute™ PCR Clean-Up Kit	100 samples
P-1006-1	DNA Concentrator Kit	50 samples
P-1006-2	DNA Concentrator Kit	100 samples

Chromatin Immunoprecipitation (ChIP)

EpiQuik™ Chromatin Immunoprecipitation (ChIP) Kit

The EpiQuik™ Chromatin Immunoprecipitation (ChIP) Kit is a convenient set of tools that allows the experimenter to perform chromatin immunoprecipitation (ChIP) at extraordinarily rapid speeds and consistency, superior to all other current ChIP methods available. The kit is ready-to-use and provides all the essential components needed to carry out a successful ChIP experiment. The EpiQuik™ ChIP kits are suitable for combining the specificity of immunoprecipitation with qualitative and quantitative PCR, MS-PCR, DNA sequencing, and southern blot as well as DNA microarray.

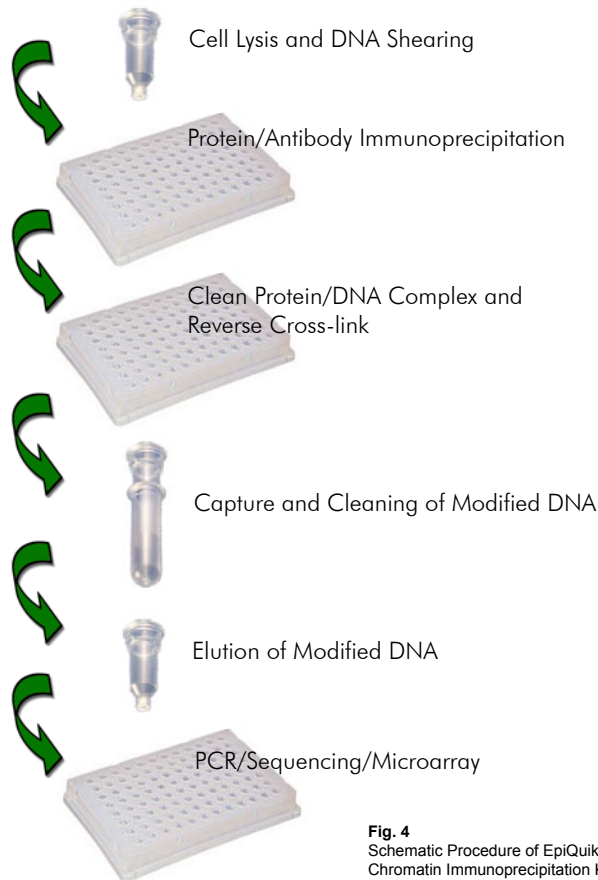


Fig. 4
Schematic Procedure of EpiQuik™ Chromatin Immunoprecipitation Kit

PRINCIPLE AND PROCEDURE

This kit includes a positive control antibody (RNA polymerase II), a negative control normal mouse IgG, and GAPDH primers that can be used as a positive control to demonstrate the efficacy of the kit reagents and protocol. RNA polymerase II is considered to be enriched in the GAPDH gene promoter that is expected to be undergoing transcription in most growing mammalian cells and can be immunoprecipitated by RNA polymerase II but not by normal mouse IgG. In this ChIP, cells are cross-linked with formaldehyde and chromatin is extracted. The chromatin is then sheared and added into the microwell immobilized with affinity antibodies. Cross-linked DNA is released from antibody-captured protein-DNA complex, reversed and purified through the specifically designed Fast-Spin Column. Eluted DNA can be used for various down-stream applications.

References
Venteclaf, Nicolas et al. (Feb 2007). Interleukin-1 receptor antagonist induction as an additional mechanism for liver receptor homolog-1 to negatively regulate the hepatic acute phase response. *J. Biol. Chem.* 282(7): 4393-9.

Why Choose the EpiQuik™ ChIP Kit?

- » The fastest ChIP method ever designed. The entire procedure can be completed within only 5 hours.
- » Drastically simplified ChIP method.
- » Strip microplate format allows manual or high throughput.
- » Compatible with all DNA amplification-based approaches.
- » Achieves very reliable and consistent assay conditions.

Related Chromatin Immunoprecipitation Kits

EpiQuik™ Tissue Chromatin Immunoprecipitation Kit
Applies Epigentek's fast ChIP method technology to mammalian tissues.

EpiQuik™ Plant ChIP Kit
Applies Epigentek's fast ChIP method technology to plants.

Ordering Information*

Catalog #	Description	Size
P-2002-1	EpiQuik™ Chromatin Immunoprecipitation Kit	24 reactions
P-2002-3	EpiQuik™ Chromatin Immunoprecipitation Kit	96 reactions
P-2003-1	EpiQuik™ Tissue ChIP Kit	24 reactions
P-2003-3	EpiQuik™ Tissue ChIP Kit	96 reactions
P-2014-24	EpiQuik™ Plant ChIP Kit	24 reactions
P-2014-48	EpiQuik™ Plant ChIP Kit	48 reactions
P-2006-24	EpiQuik™ Methyl-Histone H3-K9 ChIP Kit	24 reactions
P-2006-48	EpiQuik™ Methyl-Histone H3-K9 ChIP Kit	48 reactions
P-2007-24	EpiQuik™ Methyl-Histone H3-K4 ChIP Kit	24 reactions
P-2007-48	EpiQuik™ Methyl-Histone H3-K4 ChIP Kit	48 reactions
P-2008-24	EpiQuik™ Tissue Methyl-Histone H3-K9 ChIP Kit	24 reactions
P-2008-48	EpiQuik™ Tissue Methyl-Histone H3-K9 ChIP Kit	48 reactions
P-2009-24	EpiQuik™ Tissue Methyl-Histone H3-K4 ChIP Kit	24 reactions
P-2009-48	EpiQuik™ Tissue Methyl-Histone H3-K4 ChIP Kit	48 reactions
P-2010-24	EpiQuik™ Acetyl-Histone H3 ChIP Kit	24 reactions
P-2010-48	EpiQuik™ Acetyl-Histone H3 ChIP Kit	48 reactions
P-2011-24	EpiQuik™ Acetyl-Histone H4 ChIP Kit	24 reactions
P-2011-48	EpiQuik™ Acetyl-Histone H4 ChIP Kit	48 reactions
P-2012-24	EpiQuik™ Tissue Acetyl-Histone H3 ChIP Kit	24 reactions
P-2012-48	EpiQuik™ Tissue Acetyl-Histone H3 ChIP Kit	48 reactions
P-2013-24	EpiQuik™ Tissue Acetyl-Histone H4 ChIP Kit	24 reactions
P-2013-48	EpiQuik™ Tissue Acetyl-Histone H4 ChIP Kit	48 reactions
P-2015-24	EpiQuik™ Methyl-Histone H3-27 ChIP Kit	24 reactions
P-2015-48	EpiQuik™ Methyl-Histone H3-27 ChIP Kit	48 reactions
P-2016-24	EpiQuik™ Tissue Methyl-Histone H3-27 ChIP Kit	24 reactions
P-2016-48	EpiQuik™ Tissue Methyl-Histone H3-27 ChIP Kit	48 reactions
P-2017-24	EpiQuik™ Methyl-CpG Binding Domain Protein 2 ChIP Kit	24 reactions
P-2018-24	EpiQuik™ Tissue Methyl-CpG Binding Domain Protein 2 ChIP Kit	24 reactions

Methylated DNA Immunoprecipitation (MDIP)

EpiQuik™ Methylated DNA Immunoprecipitation Kit

The *EpiQuik™ Methylated DNA Immunoprecipitation (MDIP) Kit* is a complete set of essential components which uses a proprietary and unique procedure/composition to enrich methylated DNA. In the assay, a specific antibody to methyl cytosine is used to immunoprecipitate methylated genomic DNA. The immunoprecipitated methylated fractions can be then used for a standard DNA detection. The kit is suitable for combining the specificity of methylated DNA immunoprecipitation with qualitative and quantitative PCR, and southern blot as well as DNA microarray.

PRINCIPLE AND PROCEDURE

The *EpiQuik™ Methylated DNA Immunoprecipitation (MDIP) Kit* contains all reagents required for carrying out a successful methylated DNA immunoprecipitation directly from mammalian cells. Particularly, this kit includes a ChIP-grade 5-methylcytosine antibody and a negative control normal mouse IgG. DNA in the cells is extracted, sheared, and added into the microwell immobilized with the antibody. DNA is released from the antibody-DNA complex, and purified through the specifically designed Fast-Spin Column. Eluted DNA can be used for various down-stream applications.

EpiQuik™ Tissue Methylated DNA Immunoprecipitation Kit
Applies EpiGenetek's fast MDIP technology to mammalian tissues.

Why Choose the EpiQuik™ MDIP Kit?

- » The fastest MDIP method ever designed. The entire procedure can be completed within only 4 hours.
- » Directly immunoprecipitate the methylated fractions of DNA from cell lysates.
- » Highly efficient enrichment of methylated DNA: > 95%
- » Strip microplate format allows manual or high throughput.
- » Conveniently includes columns for DNA purification in order to save time and reduce labor.
- » Compatible with all DNA amplification-based approaches
- » Achieves very reliable and consistent assay conditions.

Ordering Information*

Catalog #	Description	Size
P-2019-24	<i>EpiQuik™ MDIP Kit</i>	24 reactions
P-2019-48	<i>EpiQuik™ MDIP Kit</i>	48 reactions
P-2020-24	<i>EpiQuik™ Tissue MDIP Kit</i>	24 reactions
P-2020-48	<i>EpiQuik™ Tissue MDIP Kit</i>	48 reactions

Protein-DNA Binding

EpiQuik™ General Protein-DNA Binding Assay (Colorimetric) Kit

This kit is designed for measuring the transcription factor of DNA binding activity in nuclear extracts. In an assay with the use of this kit, a double strand biotin-labeled oligonucleotide (oligo) containing DNA binding consensus sequence for the target transcription factor is incubated with nuclear extract in the binding assay buffer. An active form of transcription factor in the nuclear extract binds to its consensus sequence. Oligo-protein complex is then captured onto the assay microwell. The target protein can be recognized by high affinity antibody and colorimetrically measured through detection antibody-color development reagent reaction system.

EpiQuik™ General Protein-DNA Binding Assay (Fluorometric) Kit

This kit is designed for measuring the transcription factor of DNA binding activity in nuclear extracts. In an assay with the use of this kit, target TF in nuclear extract is captured by high affinity antibody onto assay microwells. A double strand oligonucleotide (oligo) containing DNA binding consensus sequence for the target TF is added into the microwell and bound to active TF in the binding assay buffer. The bound oligo is then fluorometrically detected.

Why Choose the EpiQuik™ General Protein-DNA Binding Assay Kit?

- » The fastest procedure available. An entire assay can be completed within 3 hours.
- » Strip microplate format makes the assay flexible: manual or high throughput analysis.
- » Colorimetrically or fluorometrically quantifies protein activation and uses radioactivity-free materials: safer to handle.
- » Simple, reliable, and consistent assay conditions.

Ordering Information*

Catalog #	Description	Size
P-2004	<i>EpiQuik™ General Protein-DNA Binding Assay (Colorimetric) Kit</i>	96 reactions
P-2005	<i>EpiQuik™ General Protein-DNA Binding Assay (Fluorometric) Kit</i>	96 reactions

DNA Methylation

EpiQuik™ DNA Methyltransferase (DNMT) Activity/Inhibition Assay Kit

The EpiQuik™ DNA Methyltransferase (DNMT) Activity/Inhibition Assay Kit is ready-to-use and provides all the essential components needed to carry out a successful Dnmt activity/inhibition experiment without the need for radioactivity or any special equipment. It is suitable for measuring Dnmt activity/inhibition from a broad range of species including mammalian cells/tissues, plants, and bacteria.

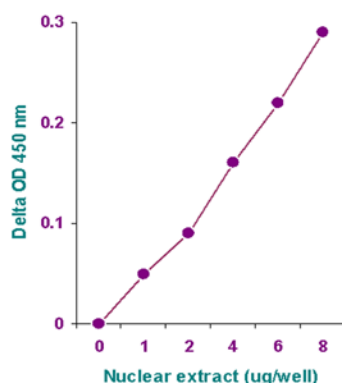


Fig. 5
Analysis of Dnmt activity in HeLa nuclear extract

PRINCIPLE AND PROCEDURE

The EpiQuik™ DNA Methyltransferase Activity/Inhibition Assay Kit is designed for measuring total Dnmt activity (de novo, maintenance). In an assay with this kit, the unique cytosine-rich DNA substrate is stably coated on the strip wells. These wells are specifically treated to have a high DNA absorption ability. Dnmt enzymes transfer methyl group to cytosine from Adomet to methylate DNA substrate. The methylated DNA can be recognized with anti-5-methylcytosine antibody. The ratio or amount of methylated DNA, which is proportional to enzyme activity, can then be colorimetrically quantified through an ELISA-like reaction.

Why Choose the EpiQuik™ DNA Methyltransferase Activity/Inhibition Assay Kit?

- » Extremely rapid procedure, which can be completed within only 3 hours.
- » Innovative colorimetric assay without radioactivity, extraction, and chromatography.
- » Strip microplate format makes the assay flexible in both manual and high throughput analysis formats.
- » Simple, reliable, and consistent assay conditions.

Also check out Epigentek's related DNA Methylation kits in the Ordering Information listing below:

Ordering Information*

Catalog #	Description	Size
P-3001-1	EpiQuik™ DNMT Activity/Inhibition Assay Kit	48 assays
P-3001-2	EpiQuik™ DNMT Activity/Inhibition Assay Kit	96 assays
P-3011-1	EpiQuik™ Dnmt1 Assay Kit	24 assays
P-3011-3	EpiQuik™ Dnmt1 Assay Kit	96 assays
P-3012-1	EpiQuik™ Dnmt3A Assay Kit	24 assays
P-3012-3	EpiQuik™ Dnmt3A Assay Kit	96 assays
P-3013-1	EpiQuik™ Dnmt3B Assay Kit	24 assays
P-3013-3	EpiQuik™ Dnmt3B Assay Kit	96 assays
P-3019-48	EpiQuik™ DNA Demethylase Activity/Inhibition Assay Kit	48 assays
P-3019-96	EpiQuik™ DNA Demethylase Activity/Inhibition Assay Kit	96 assays
P-3021-48	EpiQuik™ MBD2 Binding Activity Assay Kit	48 assays
P-3021-96	EpiQuik™ MBD2 Binding Activity Assay Kit	96 assays

Histone Methylation

Ordering Information*

Catalog #	Description	Size
P-3002-1	EpiQuik™ Histone Methyltransferase Activity/Inhibition Assay Kit (H3-K4)	48 assays
P-3002-2	EpiQuik™ Histone Methyltransferase Activity/Inhibition Assay Kit (H3-K4)	96 assays
P-3003-1	EpiQuik™ Histone Methyltransferase Activity/Inhibition Assay Kit (H3-K9)	48 assays
P-3003-2	EpiQuik™ Histone Methyltransferase Activity/Inhibition Assay Kit (H3-K9)	96 assays
P-3005-48	EpiQuik™ Histone Methyltransferase Activity/Inhibition Assay Kit (H3-K27)	48 assays
P-3005-96	EpiQuik™ Histone Methyltransferase Activity/Inhibition Assay Kit (H3-K27)	96 assays

Catalog #	Description	Size
P-3015-96	EpiQuik™ <i>In Situ</i> Histone H3-K4 Methylation Assay Kit	96 assays
P-3015-192	EpiQuik™ <i>In Situ</i> Histone H3-K4 Methylation Assay Kit	2x96 assays
P-3016-96	EpiQuik™ <i>In Situ</i> Histone H3-K9 Methylation Assay Kit	96 assays
P-3016-192	EpiQuik™ <i>In Situ</i> Histone H3-K9 Methylation Assay Kit	2x96 assays
P-3017-48	EpiQuik™ Global Histone H3-K4 Methylation Assay Kit	48 assays
P-3017-96	EpiQuik™ Global Histone H3-K4 Methylation Assay Kit	96 assays
P-3018-48	EpiQuik™ Global Histone H3-K9 Methylation Assay Kit	48 assays
P-3018-96	EpiQuik™ Global Histone H3-K9 Methylation Assay Kit	96 assays
P-3020-48	EpiQuik™ Global Histone H3-K27 Methylation Assay Kit	48 assays
P-3020-96	EpiQuik™ Global Histone H3-K27 Methylation Assay Kit	96 assays

Histone Deacetylation

EpiQuik™ HDAC Activity/Inhibition Assay Kit (Colorimetric)

The *EpiQuik™ HDAC Activity/Inhibition Assay Kit* is a ready-to-use set of essential components needed to measure HDAC activity/inhibition safely and quickly. It is suitable for measuring HDAC activity/inhibition from a broad range of species including mammalian cells/tissues, plants, and bacteria.

PRINCIPLE AND PROCEDURE

The *EpiQuik™ HDAC Activity/Inhibition Assay Kit* is designed for measuring total HDAC activity/inhibition. In an assay with this kit, the unique acetylated histone substrate is stably captured on the strip wells. Active HDACs bind to and deacetylate histone substrate. The remaining un-deacetylated substrate can be recognized with high affinity acetylated histone antibody. The ratio or amount of the un-deacetylated histone, which is inversely proportional to HDAC enzyme activity, can be then colorimetrically quantified through an ELISA-like reaction.

Specific Histone Deacetylation Kits

EpiQuik™ HDAC1 Assay Kit

EpiQuik™ HDAC2 Assay Kit

EpiQuik™ HDAC8 Assay Kit

Innovative colorimetric assay semi-quantitatively measures HDAC1, HDAC2, or HDAC8 amounts with no need for electrophoresis through the HRP conjugated secondary antibody-color development system and is proportional to the intensity of color development.

Why Choose the EpiQuik™ HDAC Activity/Inhibition Assay Kit?

- » Very quick procedure, which can be completed within only 3 hours.
- » Innovative colorimetric assay without radioactivity, extraction, and chromatography.
- » Direct measurement of HDAC activity and inhibition with no use of lysyl endopeptidase, thereby avoiding the false inhibitory effect on HDACs.
- » Strip microplate format makes the assay flexible in both manual and high throughput analysis formats.
- » Simple, reliable, and consistent assay conditions.

Ordering Information*

Catalog #	Description	Size
P-4002-48	<i>EpiQuik™ HDAC Activity/Inhibition Assay Kit (Colorimetric)</i>	48 assays
P-4002-96	<i>EpiQuik™ HDAC Activity/Inhibition Assay Kit (Colorimetric)</i>	96 assays
P-4005-24	<i>EpiQuik™ HDAC1 Assay Kit</i>	24 assays
P-4005-96	<i>EpiQuik™ HDAC1 Assay Kit</i>	96 assays
P-4006-24	<i>EpiQuik™ HDAC2 Assay Kit</i>	24 assays
P-4006-96	<i>EpiQuik™ HDAC2 Assay Kit</i>	96 assays
P-4007-24	<i>EpiQuik™ HDAC8 Assay Kit</i>	24 assays
P-4007-96	<i>EpiQuik™ HDAC8 Assay Kit</i>	96 assays

Histone Acetylation

EpiQuik™ Global Histone H3 Acetylation Assay Kit

EpiQuik™ Global Histone H4 Acetylation Assay Kit

The *EpiQuik™ Global Histone H3 or H4 Assay Kit* is a ready-to-use set of essential components designed to measure global acetylation of H3 or H4 rapidly and efficiently. It is suitable for specifically measuring global histone H3 or H4 acetylation using a variety of mammalian cells including fresh and frozen tissues, cultured adherent and suspension cells.

Why Choose the EpiQuik™ Global Histone H3 or H4 Acetylation Assay Kit?

- » Quick and efficient procedure, which can be finished within 5 hours.
- » Innovative colorimetric assay without radioactivity, extraction, and chromatography.
- » Strip microplate format makes the assay flexible in both manual and high throughput analysis formats.
- » Simple, reliable, and consistent assay conditions.

PRINCIPLE AND PROCEDURE

The *EpiQuik™ Global Histone H3 or H4 Acetylation Assay Kit* is designed for measuring global histone H3 or H4 acetylation. In an assay with this kit, the histone proteins are stably spotted on the strip wells. The acetylated histone H3 or H4 can be recognized with high-affinity antibody. The ratio or amount of acetylated histone H3 or H4 can be quantified through HRP conjugated secondary antibody-color development system and is proportional to the intensity of color development.

Ordering Information*

Catalog #	Description	Size
P-4008-48	<i>EpiQuik™ Global Histone H3 Acetylation Assay Kit</i>	48 assays
P-4008-96	<i>EpiQuik™ Global Histone H3 Acetylation Assay Kit</i>	96 assays
P-4009-48	<i>EpiQuik™ Global Histone H4 Acetylation Assay Kit</i>	48 assays
P-4009-96	<i>EpiQuik™ Global Histone H4 Acetylation Assay Kit</i>	96 assays

Gene Knockdown Quantification (General)

QuantiSir™ General Gene Knockdown Quantification Kit

The *QuantiSir™ General Gene Knockdown Quantification Kit* is part of Epigentek's advanced gene knockdown assay system to quantify gene knockdown induced by siRNA or antisense oligonucleotide at the protein level in cultured cells or tissues. The kit offers a highly more convenient process than traditional methods such as Northern blot, quantitative RT-PCR, and Western Blot. The kit addresses and corrects traditional problems such as the decrease in the amount of a specific mRNA not typically correlating well with protein levels present in the cell, and the lack of ability to discriminate between samples in which the differences in protein levels are minimal.

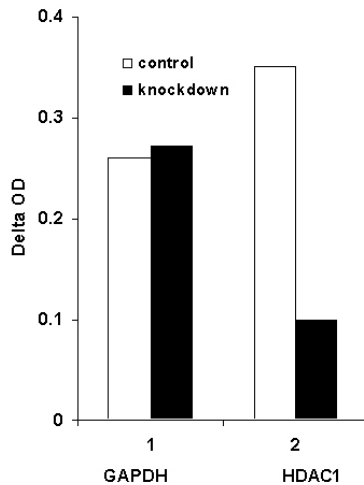


Fig. 6
Quantification of HDAC1 knockdown. MCF-7 cells were treated or untreated with HDAC1 siRNA. Protein extracts were prepared and used for detection of HDAC1 protein level.

Why Choose QuantiSir™ Gene Knockdown Quantification Kits?

- » Quick and efficient; completion of entire assay requires only 4 hours.
- » Innovative colorimetric assay without radioactivity, electrophoresis, and chromatography.
- » The internal control is included in the kits to correct for the variations in the cell number or protein concentrations.
- » Strip microplate format makes the assay flexible in both manual and high throughput analysis formats.

PRINCIPLE AND PROCEDURE

The *QuantiSir™ General Gene Knockdown Quantification Kit* is specifically designed for quantifying gene knockdown induced by siRNA or antisense oligonucleotide at the protein level in the cultured cells or tissues. In the assay, the cell lysates containing the targeted protein are stably spotted on the specifically treated microwells with unique protein capture buffer. The spotted protein can be then recognized with the target-specific antibody and colorimetrically measured through detection antibody-chromogen reaction system. GAPDH expression as the internal control can be used for normalizing the effect of target gene knockdown.

Ordering Information*

Catalog #	Description	Size
P-5001-48	QuantiSir™ General Gene Knockdown Quanti. Kit	48 assays
P-5001-96	QuantiSir™ General Gene Knockdown Quanti. Kit	96 assays

Gene Knockdown Quantification (Specific)

Epigentek's series of *QuantiSir™ Specific Gene Knockdown Quantification Kits* offers measurement of knockdown in 8 different applications and 387 genes. All *QuantiSir™ Specific Gene Knockdown Quantification Kits* are offered in 96 assay sizes.

For Epigenetic Regulators*

Catalog #	Gene	Catalog #	Gene
P-5002-DNMT1-96	Dnmt1	P-5002-P130CAF1-96	P130CAF1
P-5002-DNMT2-96	Dnmt2	P-5002-P300-96	P300
P-5002-DNMT3A-96	Dnmt3a	P-5002-PARP-96	PARP
P-5002-DNMT3B-96	Dnmt3b	P-5002-RPII-96	RNA Polymerase II
P-5002-EED-96	EED	P-5002-SET9-96	SET9
P-5002-EZH2-96	EZH2	P-5002-SETDB1-96	SETDB1
P-5002-G9A-96	G9A	P-5002-SIRT1-96	SIRT1
P-5002-HAT1-96	HAT1	P-5002-SRC1-96	SRC1
P-5002-HDAC1-96	HDAC1	P-5002-SUMO1-96	SUMO1
P-5002-HDAC2-96	HDAC2	P-5002-SUMO2-96	SUMO2
P-5002-HDAC3-96	HDAC3	P-5002-SUV39H1-96	SUV39H1
P-5002-HDAC4-96	HDAC4	P-5002-TAFII250-96	TAFII250
P-5002-HDAC5-96	HDAC5	P-5002-TFIIIB-96	TFIIIB
P-5002-HDAC6-96	HDAC6		
P-5002-HDAC7-96	HDAC7		
P-5002-HDAC8-96	HDAC8		
P-5002-HDAC9-96	HDAC9		
P-5002-HDAC10-96	HDAC10		
P-5002-HDAC11-96	HDAC11		
P-5002-LSD1-96	LSD1		
P-5002-MBD2-96	MBD2		
P-5002-MeCP2-96	MeCP2		
P-5002-NCOR2-96	NCOR2		
P-5002-NSD1-96	NSD1		

Please refer to the application category when you order *QuantiSir™* specific kits, in addition to the catalog number.

For DNA Damage/Repair*

Catalog #	Gene	Catalog #	Gene
P-5003-APE-96	APE	P-5003-PRDX4-96	PRDX4
P-5003-ATM-96	ATM	P-5003-RAD1-96	Rad1
P-5003-ATR-96	ATR	P-5003-RAD9-96	Rad9
P-5003-BACH1-96	BACH1	P-5003-RAD17-96	Rad17
P-5003-CRE-96	CRE	P-5003-RAD21-96	Rad21
P-5003-CTIP-96	CTIP	P-5003-RAD50-96	Rad50
P-5003-DDB1-96	DDB1	P-5003-RAD51-96	Rad51
P-5003-DDB2-96	DDB2	P-5003-RAD52-96	Rad52
P-5003-DMC1-96	DMC1	P-5003-RAD54-96	Rad54
P-5003-ERCC1-96	ERCC1	P-5003-RPA-96	RPA
P-5003-ERCC2-96	ERCC2	P-5003-RPA14-96	RPA14
P-5003-FANCD2-96	FANCD2	P-5003-RPA32-96	RPA32
P-5003-GSTP1-96	GSTP1	P-5003-SMC1-96	SMC1
P-5003-KU70-96	Ku70	P-5003-SOD-96	SOD
P-5003-KU80-96	Ku80	P-5003-XPA-96	XPA
P-5003-MDR1-96	MDR1	P-5003-XPC-96	XPC
P-5003-MGMT-96	MGMT	P-5003-XPB-96	XPB
P-5003-MLH1-96	MLH1	P-5003-XPG-96	XPG
P-5003-MRE11-96	MRE11	P-5003-XRCC1-96	XRCC1
P-5003-MSH2-96	MSH2	P-5003-XRCC2-96	XRCC2
P-5003-MSH6-96	MSH6	P-5003-XRCC3-96	XRCC3
P-5003-MUEB1-96	MueB1	P-5003-XRCC4-96	XRCC4
P-5003-NM23-96	nm23		
P-5003-PMS2-96	PMS2		

Gene Expression & Silencing

For Cell Death/Apoptosis*

Catalog #	Gene	Catalog #	Gene
P-5004-53BP-96	53BP	P-5004-DAP-96	DAP
P-5004-AIF-96	AIF	P-5004-DAPK1-96	DAPK1
P-5004-APAF1-96	APAF1	P-5004-DAXX-96	DAXX
P-5004-ARTS-96	ARTS	P-5004-DCR1-96	DcR1
P-5004-BAD-96	BAD	P-5004-DCR2-96	DcR2
P-5004-BAG1-96	BAG1	P-5004-DEDD-96	DEDD
P-5004-BAK-96	BAK	P-5004-DICE1-96	DICE1
P-5004-BAP1-96	BAP1	P-5004-DR3-96	DR3
P-5004-BAP31-96	BAP31	P-5004-DR4-96	DR4
P-5004-BAX-96	Bax	P-5004-DR5-96	DR5
P-5004-BCL2-96	BCL-2	P-5004-FADD-96	FADD
P-5004-BCL6-96	BCL-6	P-5004-FAF1-96	FAF1
P-5004-BCL10-96	BCL-10	P-5004-FASL-96	FASL
P-5004-BCL11-96	BCL-11	P-5004-FLIP-96	FLIP
P-5004-BCLW-96	BCL-w	P-5004-HIF-96	HIF
P-5004-BCLXL-96	BCL-xl	P-5004-ICAD-96	ICAD
P-5004-BID-96	BID	P-5004-IGFBP3-96	IGFBP3
P-5004-BMF-96	BMF	P-5004-IKKA-96	IKK- α
P-5004-BNIP3-96	BNIP3	P-5004-IKKB-96	IKK- β
P-5004-BRAF-96	B-Raf	P-5004-IKKG-96	IKK- γ
P-5004-CAD-96	CAD	P-5004-PIDD-96	PIDD
P-5004-CAS-96	CAS	P-5004-PUMA-96	PUMA
P-5004-CASP1-96	Caspase-1	P-5004-RAF1-96	RAF1
P-5004-CASP2-96	Caspase-2	P-5004-RAIDD-96	RAIDD
P-5004-CASP3-96	Caspase-3	P-5004-SMAC-96	SMAC
P-5004-CASP4-96	Caspase-4	P-5004-SURVIV-96	Survivin
P-5004-CASP6-96	Caspase-6	P-5004-TOB-96	TOB
P-5004-CASP7-96	Caspase-7	P-5004-TRADD-96	TRADD
P-5004-CASP8-96	Caspase-8	P-5004-TRAF2-96	TRAF2
P-5004-CASP9-96	Caspase-9	P-5004-TRAIL-96	TRAIL
P-5004-CD95-96	CD-95	P-5004-TRAP1-96	TRAP1
P-5004-CYTOC-96	Cytochrome C	P-5004-TWEAK-96	TWEAK
		P-5004-XIAP-96	XIAP

For Cell Cycle Regulation*

Catalog #	Gene	Catalog #	Gene
P-5005-1433A-96	14-3-3- α	P-5005-CYCLB-96	Cyclin B
P-5005-1433B-96	14-3-3- β	P-5005-CYCLB2-96	Cyclin B2
P-5005-1433G-96	14-3-3- γ	P-5005-CYCLD1-96	Cyclin D1
P-5005-APC-96	APC	P-5005-CYCLD2-96	Cyclin D2
P-5005-ATRIP-96	ATRIP	P-5005-CYCLD3-96	Cyclin D3
P-5005-AURA-96	Aurora A	P-5005-CYCLE-96	Cyclin E
P-5005-AURB-96	Aurora B	P-5005-CYCLE2-96	Cyclin E2
P-5005-BIN1-96	Bin 1	P-5005-CYCLG1-96	Cyclin G1
P-5005-BMI1-96	Bmi 1	P-5005-CYCLH-96	Cyclin H
P-5005-CAK1-96	CAK1	P-5005-DHFR-96	DHFR
P-5005-CDC13-96	CDC13	P-5005-GADD45-96	GADD45
P-5005-CDC25A-96	CDC25A	P-5005-GADD153-96	GADD153
P-5005-CDC25B-96	CDC25B	P-5005-P14-96	P14
P-5005-CDC25C-96	CDC25C	P-5005-P15-96	P15
P-5005-CDC27-96	CDC27	P-5005-P16-96	P16
P-5005-CDC2P34-96	CDC2P34	P-5005-P18-96	P18
P-5005-CDC37-96	CDC37	P-5005-P19-96	P19
P-5005-CDC42-96	CDC42	P-5005-P21-96	P21
P-5005-CDC6-96	CDC6	P-5005-P27-96	P27
P-5005-CDK2-96	CDK2	P-5005-P57-96	P57
P-5005-CDK6-96	CDK6	P-5005-P73-96	P73
P-5005-CDK7-96	CDK7	P-5005-PLK1-96	PLK1
P-5005-CDK8-96	CDK8	P-5005-PTEN-96	PTEN
P-5005-CDK9-96	CDK9	P-5005-SHP1-96	SHP1
P-5005-CHFR-96	CHFR	P-5005-SKP1-96	SKP1
P-5005-CHK1-96	Chk 1	P-5005-SKP2-96	SKP2
P-5005-CHK1-96	Chk 2	P-5005-TK-96	TK
P-5005-CYCLA-96	Cyclin A	P-5005-TS-96	TS

For Cell Proliferation*

Catalog #	Gene	Catalog #	Gene
P-5006-BAFF-96	BAFF	P-5006-IL8-96	IL-8
P-5006-BPM2-96	BMP2	P-5006-IL12-96	IL-12
P-5006-BPM4-96	BPM4	P-5006-IL18-96	IL-18
P-5006-BPM6-96	BPM6	P-5006-INFA-96	INF- α
P-5006-EGF-96	EGF	P-5006-INFB-96	INF- β
P-5006-EGFR-96	EGFR	P-5006-INFG-96	INF- γ
P-5006-ENDO-96	Endostatin	P-5006-LEF1-96	LEF1
P-5006-FAS-96	FAS	P-5006-MMP1-96	MMP1
P-5006-FGF1-96	FGF1	P-5006-MMP9-96	MMP9
P-5006-FGF4-96	FGF4	P-5006-MMP10-96	MMP10
P-5006-FGF5-96	FGF5	P-5006-MMP11-96	MMP11
P-5006-FGFR1-96	FGFR1	P-5006-PDGFR-96	PDGFR- α
P-5006-HBP1-96	HBP1	P-5006-PDGFRB-96	PDGFR- β
P-5006-HGF-96	HGF	P-5006-PLASMIN-96	Plasminogen
P-5006-IGF2-96	IGF2	P-5006-TGFA-96	TGF- α
P-5006-IL6-96	IL-6	P-5006-TGFB-96	TGF- β

P-5006-TNFA-96	TNF- α	P-5006-VEGFR1-96	VEGFR1
P-5006-TNFB-96	TNF- β	P-5006-VEGFR2-96	VEGFR2
P-5006-TNFR1-96	TNFR1	P-5006-WNT1-96	Wnt 1
P-5006-TNFR2-96	TNFR2	P-5006-WNT2-96	Wnt 2
P-5006-TRAF1-96	TRAF-1	P-5006-WNT3-96	Wnt 3
P-5006-TRAF2-96	TRAF-2	P-5006-WNT-96	Wnt 4
P-5006-VEGF-96	VEGF		

For Tumor Suppressors/Oncogenes*

Catalog #	Gene	Catalog #	Gene
P-5007-BCRABL-96	BCR-abl	P-5007-HRAS-96	H-Ras
P-5007-BD3-96	Bd-3	P-5007-KRAS-96	K-Ras
P-5007-BMYB-96	B-myb	P-5007-MAD1-96	MAD1
P-5007-BCRA1-96	BCRA1	P-5007-MDM2-96	MDM2
P-5007-BCRA2-96	BCRA2	P-5007-MOS-96	Mos
P-5007-CABL1-96	c-ABL1	P-5007-NAB2-96	NAB2
P-5007-CFOS-96	c-fos	P-5007-NKX31-96	NKx3.1
P-5007-CKIT-96	c-kit	P-5007-NRAS-96	N-Ras
P-5007-CMET-96	c-met	P-5007-P107-96	P107
P-5007-CMYC-96	c-myc	P-5007-P130-96	P130
P-5007-DCC-96	DCC	P-5007-P21RAS-96	P21Ras
P-5007-DP1-96	DP1	P-5007-P53-96	P53
P-5007-DP2-96	DP2	P-5007-RASSF1A-96	RASSF1A
P-5007-E2F1-96	E2F1	P-5007-RB-96	RB
P-5007-E2F2-96	E2F2	P-5007-RB2-96	RB2
P-5007-E2F3-96	E2F3	P-5007-SNAIL-96	Snail
P-5007-E2F4-96	E2F4	P-5007-SRC-96	SRC
P-5007-E2F5-96	E2F5	P-5007-TBP52-96	TBP52
P-5007-E2F6-96	E2F6	P-5007-TRP1-96	TRP1
P-5007-ELK1-96	ELK1	P-5007-VMYB-96	v-Myb
		P-5007-WT1-96	WT-1

For Signal Transduction*

Catalog #	Gene	Catalog #	Gene
P-5008-ACTIV-96	Activin	P-5008-NEK2-96	NEK2
P-5008-ACTIVRE-96	Activin Receptor	P-5008-NFKB10550-96	NF- κ B105/50
P-5008-AIB1-96	AIB1	P-5008-NFKB65-96	NF- κ B65
P-5008-AKT-96	AKT	P-5008-P38-96	P38
P-5008-AKT1S473-96	AKT1-s473	P-5008-PAK1-96	PAK1
P-5008-AKT3-96	AKT3	P-5008-PCNA-96	PCNA
P-5008-AMPKA1-96	AMPK- α 1	P-5008-PDK1-96	PDK1
P-5008-AR-96	Androgen Receptor	P-5008-PIK3-96	PIK-3
P-5008-CCR2-96	CCR2	P-5008-PIK-96	PIK
P-5008-CCR5-96	CCR5	P-5008-PKARII-96	PKA RII
P-5008-CJUN-96	c-jun	P-5008-PKCA-96	PKC- α
P-5008-CP450-96	Cytochrome p450	P-5008-PCKB-96	PKC- β
P-5008-CXCR5-96	CXCR5	P-5008-PR-96	PR
P-5008-ERA-96	ER- α	P-5008-RARA-96	RAR- α
P-5008-ERB-96	ER- β	P-5008-RARB-96	RAR- β
P-5008-ERBB2-96	ErBB2	P-5008-RXR-96	RXR- β
P-5008-ERK1-96	ERK1	P-5008-SMAD1-96	SMAD1
P-5008-ERK2-96	ERK2	P-5008-SMAD2-96	SMAD2
P-5008-GR-96	GR	P-5008-SMAD4-96	SMAD4
P-5008-GSK3A-96	GSK3- α	P-5008-STAT1-96	STAT1
P-5008-GSK3B-96	GSK3- β	P-5008-STAT2-96	STAT2
P-5008-JNK-96	JNK	P-5008-STAT3-96	STAT3
P-5008-JNK2-96	JNK2	P-5008-STAT4-96	STAT4
P-5008-MTOR-96	mTOR	P-5008-STAT5-96	STAT5
P-5008-NAK-96	NAK	P-5008-VIDR-96	VIDR

For Transcription Factors*

Catalog #	Gene	Catalog #	Gene
P-5009-ABIN1-96	ABIN1	P-5009-IRF-96	IRF-1
P-5009-AP1-96	AP1	P-5009-KAISO-96	Kaiso
P-5009-AP2-96	AP2	P-5009-MRG1-96	MRG1
P-5009-ARC-96	ARC	P-5009-MYOD-96	MyoD
P-5009-ATF1-96	ATF1	P-5009-NF1-96	NF-1
P-5009-ATF2-96	ATF2	P-5009-NFAT2-96	NFAT2
P-5009-ATRX-96	ATRX	P-5009-OCT2-96	OCT2
P-5009-BLIMP-96	BLIMP	P-5009-PCAF-96	Pcaf
P-5009-BTEB-96	BTEB	P-5009-PML-96	PML
P-5009-CAF1-96	CAF1	P-5009-PU1-96	PU.1
P-5009-CIITA-96	CIITA	P-5009-RING1-96	Ring1
P-5009-COES-96	COES	P-5009-SF2ASF-96	SF2/ASF
P-5009-CREB-96	CREB	P-5009-SRF-96	SRF
P-5009-CREL-96	CREL	P-5009-SRY-96	SRY
P-5009-CREM-96	CREM	P-5009-TAF-96	TAF
P-5009-CTBP-96	CTBP	P-5009-TBR1-96	TBR1
P-5009-CTCF-96	CTCF	P-5009-TFII-96	TFII
P-5009-EGR1-96	EGR1	P-5009-TFIIIB-96	TFIIIB
P-5009-EKLF-96	EKLF	P-5009-TIF1-96	TIF-1
P-5009-HBP1-96	HBP1	P-5009-TRAP-96	TRAP
P-5009-HIF-96	HIF	P-5009-TTF-96	TTF
P-5009-HMG1-96	HMG1	P-5009-WT1-96	WT-1
P-5009-HNRNP-96	HnRNP	P-5009-YY1-96	YY-1
P-5009-HP1-96	HP1		

Other Related Products

EpiQuik™ Nuclear Extraction Kit I *EpiQuik™ Nuclear Extraction Kit II (nucleic acid-free)*

The *EpiQuik™ Nuclear Extraction Kit* provides the simple and selective method for extracting nuclear proteins used for a variety of applications. These applications may include western blotting, protein-DNA binding assays, nuclear enzyme assays, and others requiring optimized or nucleic acid-free nuclear proteins. The *EpiQuik™ Nuclear Extraction Kits* are also specifically designed to meet the requirements of nuclear extracts used in various *EpiQuik™* assays. The *EpiQuik™ Nuclear Extraction Kits* can be used to extract nuclear proteins from mammalian cells and tissue samples. The *EpiQuik™ Nuclear Extraction Kits* include Kit I for regular nuclear extraction and Kit II for nucleic acid-free nuclear extraction. The *EpiQuik™ Nuclear Extraction Kits* have the fastest procedure that can be finished within 60 minutes.

EpiQuik™ Whole Cell Extraction Kit

The *EpiQuik™ Whole Cell Extraction Kit* provides the simple and selective method for extracting whole cell proteins used for a variety of applications. These applications may include western blotting, cellular enzyme assays, and others requiring cellular proteins. The *EpiQuik™ Whole Extraction Kits* are also specifically designed to meet the requirements of whole cell extracts used in *EpiQuik™* assays. The *EpiQuik™ Whole Cell Extraction Kit* can be used to extract cellular proteins from mammalian cells and tissue samples. The *EpiQuik™ Whole Cell Extraction Kit* has a rapid procedure that can be finished within 45 minutes.

EpiQuik™ Superoxide Dismutase Activity/Inhibition Assay Kit (Colorimetric)

Superoxide dismutase (SOD) is one of the most important enzymes in defending oxidative stress. SOD catalyses the dismutation of superoxide anion (O₂⁻) into hydrogen peroxide and molecular oxygen (O₂). Oxidative stress through reactive oxygen species (ROS) plays an important role in the etiology and progression in certain diseases such as cancer, heart disease, and various autoimmune disorders. ROS have shown to cause cellular damage, enzyme inactivation, and more particularly, epigenetic damage of DNA. Thus the determination of SOD activity is necessary in various research fields related to human diseases. There are several methods used for measuring SOD activity. However most of these methods have some drawbacks in selectivity, rapidity, and convenience. The *EpiQuik™ Superoxide Dismutase Activity/Inhibition Assay Kit* addresses these problems by using a unique procedure to measure SOD activity.

Why Choose the *EpiQuik™ Superoxide Dismutase Activity/Inhibition Assay Kit (Colorimetric)*?

- » Very rapid procedure allows completion within 60 minutes.
- » Extremely simple: only one step.
- » High throughput microplate format with consistent reaction conditions.

F-spin Columns & Collection Tubes



Epigentek's F-spin columns and collection tubes are offered together for convenience and are designed for optimized use with many of Epigentek's products. The durable construction of the columns allows for purification of up to 5 µg DNA through the innovative design of the tip and filter membrane.

CytoX-Red™ Cell Proliferation/Cytotoxicity Assay Kit

(Microplate Format)

Protein synthesis rate is demonstrated to be proportional to cell proliferation and is a very sensitive cytotoxicology marker. The *CytoX-Red™ Cell Proliferation/Cytotoxicity Assay Kit* provides the simple and convenient method for measuring cell viability, proliferation, and cytotoxicity in adherent or monolayer cells through quantifying total protein contents. The *CytoX-Red™* is proven to be accurate and yields reproducible results. A complete proliferation/cytotoxicity assay can be finished within 20 minutes. Thus the *CytoX-Red™* provides a considerably faster procedure than any competitor kits.

CytoX-Violet™ Cell Proliferation/Cytotoxicity Assay Kit

(Microplate Format)

The *CytoX-Violet™ Cell Proliferation/Cytotoxicity Assay Kit* utilizes a special dye composition to measure cell viability, proliferation, and cytotoxicity in both adherent and suspension cells by measuring the activity of the cellular dehydrogenases. The colorimetric change of the *CytoX-Violet™* indicator solution is directly proportional to cell viability or proliferation. The *CytoX-Violet™* has only one step and is proven to be very simple, accurate, and yields reproducible results.

Ordering Information*

Catalog #	Description	Size
OP-0000-40	F-spin Column/Collection Tube	40 count
OP-0000-100	F-spin Column/Collection Tube	100 count
OP-0001-1	<i>EpiQuik™ SOD Activity/Inhibition Assay Kit (Color.)</i>	96 assays
OP-0001-2	<i>EpiQuik™ SOD Activity/Inhibition Assay Kit (Color.)</i>	2x96 assays
OP-0001-3	<i>EpiQuik™ SOD Activity/Inhibition Assay Kit (Color.)</i>	5x96 assays
OP-0002-1	<i>EpiQuik™ Nuclear Extraction Kit I</i>	100 assays
OP-0002-2	<i>EpiQuik™ Nuclear Extraction Kit II</i>	100 assays
OP-0003	<i>EpiQuik™ Whole Cell Extraction Kit</i>	100 assays
OP-0004-1	<i>CytoX-Red™ Cell Proliferation/Cytotoxicity Assay Kit</i>	3x96 assays
OP-0004-2	<i>CytoX-Red™ Cell Proliferation/Cytotoxicity Assay Kit</i>	5x96 assays
OP-0004-3	<i>CytoX-Red™ Cell Proliferation/Cytotoxicity Assay Kit</i>	10x96 assays
OP-0005-1	<i>CytoX-Violet™ Cell Proliferation/Cytotoxicity Assay Kit</i>	5x96 assays
OP-0005-2	<i>CytoX-Violet™ Cell Proliferation/Cytotoxicity Assay Kit</i>	10x96 assays
OP-0005-3	<i>CytoX-Violet™ Cell Proliferation/Cytotoxicity Assay Kit</i>	20x96 assays

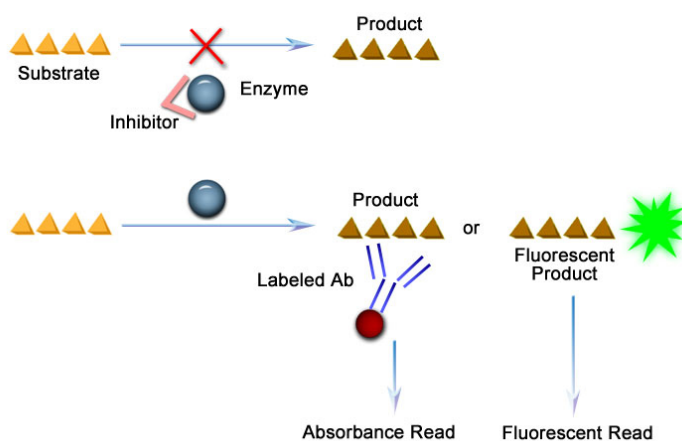
Epigenetic Drug Discovery Services

Epigentek offers its advanced and proprietary epigenetic technology as a service to meet your needs at each stage of your drug discovery continuum. You can now enhance your drug discovery and development without the burden of increased staff and equipment, choose better drug candidates for further development, determine specificity of lead candidates against a wide range of epigenetic targets, and validate the lead candidates in a rapid, reliable, and high throughput assay format. The following screening services can enable the drug candidates to be tested *in situ* and *in vitro*:

Epigenase™ Epigenetic Enzyme Inhibitor Screening System

The Epigenase™ proprietary technology and method provides a platform to screen inhibitors specific to individual HDACs and Dnmts in addition to the testing of inhibitors against total enzymatic activity.

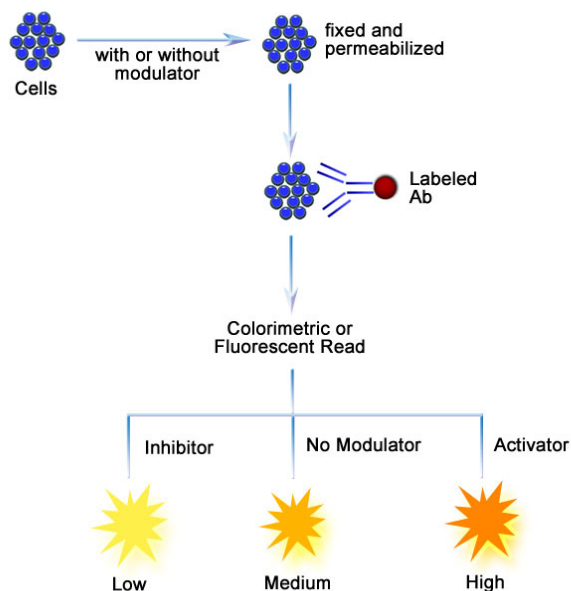
Principle of Epigenase™ Screening



EpiModifier™ Epigenetic Modulator Screening System

The EpiModifier™ proprietary technology and method provides a platform that allows screening of modulators that target site specific histone modifications, global DNA methylation, and functional region-specific DNA methylation.

Principle of EpiModifier™ Screening



USA SERVICES:

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NON-USA SERVICES:

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