

# EpiQuik™ Whole Cell Extraction Kit

Base Catalog # OP-0003

## PLEASE READ THIS ENTIRE USER GUIDE BEFORE USE

The *EpiQuik*™ Whole Cell Extract Kit is very suitable for quick preparation of whole cell extracts from mammalian cells and tissue samples. The *EpiQuik*™ Whole Cell Extract Kit is recommended for use with *EpiQuik*™ Superoxide Dismutase Assay/Inhibition assay kit.

## KIT CONTENTS

Components	100 extractions OP-0003-100
5X Extraction Buffer	20 ml
1000X DTT Solution*	100 $\mu$ l
1000X Protease Inhibitor Cocktail (PIC)*	100 $\mu$ l

\*For maximum recovery of the products, centrifuge the original vial after thawing prior to opening the cap.

## SHIPPING & STORAGE

Upon receipt, store all components of the kit at 4°C. The kit is stable for up to 1 year from the date of shipment, when stored properly.

## GENERAL PRODUCT INFORMATION

**Usage Limitations:** The *EpiQuik*™ Whole Cell Extract Kit is for research use only and is not intended for diagnostic or therapeutic application.

**Product Updates:** EpigenTek reserves the right to change or modify any product to enhance its performance and design. The information in this User Guide is subject to change at any time without notice. Be sure to use the latest User Guide for this kit which can be accessed online at [www.epigenetek.com/datasheet](http://www.epigenetek.com/datasheet).

**Intellectual Property:** The *EpiQuik*™ is a trademark of EpigenTek, Inc.

## A BRIEF OVERVIEW

The *EpiQuik*™ Whole Cell Extraction Kit provides a 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 Cell Extraction Kit is 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. The *EpiQuik*™ Whole Cell Extraction Kit has the fastest procedure available on the current market that can be finished within 45 minutes.

## PROTOCOL

Before starting, check if the 5X Extraction Buffer contains precipitates before using. If so, warm (at room temperature or 37°C) and shake or vortex the buffer until the precipitates are re-dissolved.

### Cell Pellet Preparation

*For Monolayer or Adherent Cells:*

1. Cells (treated or untreated) are grown to 80-90% confluency and trypsinized after removing growth medium. Cells are then collected into a 15 ml conical tube and counted in a hemacytometer.
2. Cells are washed once with PBS and pelleted by centrifugation at 1000 rpm for 5 minutes.

*For Non-adherent Cells:*

1. Grow cells to  $2 \times 10^6$ /ml and collect the cells into a 15 ml conical tube.
2. Centrifuge the cells for 5 minutes at 1000 rpm and discard the supernatant. Wash cells with PBS once by centrifugation at 1000 rpm for 5 minutes. Discard the supernatant.

### Cell Extract Preparation

1. Prepare **1X Extraction Buffer** by adding 1 ml of the **5X Extraction Buffer** to 4 ml of distilled water.
2. Add **1000X DTT Solution** and **PIC** to **1X Extraction Buffer** at a 1:1000 ratio. Re-suspend cell pellet in 100  $\mu$ l of ice cold **1X Extraction Buffer** per  $10^6$  adherent cells, or  $2 \times 10^6$  non-adherent cells.
3. Transfer the cell solution to a micro-centrifuge vial. Incubate on ice for 15 minutes with vigorous vortex (5 seconds) per 5 minutes.
4. Centrifuge the cell solution for 10 minutes at 14,000 rpm at 4°C and transfer the supernatant into a new micro-centrifuge vial.
5. Measure the protein concentration of cell extract.
6. Use immediately or aliquot and freeze supernatant at  $-70^{\circ}\text{C}$  until further use. Avoid freeze/thaw cycle.

### RELATED PRODUCTS

OP-0002-1

EpiQuik™ Nuclear Extraction Kit I

OP-0022-100

EpiQuik™ Nuclear Extraction Kit II (Nucleic Acid-Free)