
crp Polyclonal Antibody

(Catalog #A55435)

Background

A global transcription regulator. Complexes with cyclic AMP (cAMP) which allosterically activates DNA binding (to consensus sequence 5'-AAATGTGATCTAGATCACATTT-3') to directly regulate the transcription of about 300 genes in about 200 operons and indirectly regulate the expression of about half the genome. There are 3 classes of CRP promoters; class I promoters have a single CRP-binding site upstream of the RNA polymerase (RNAP)-binding site, whereas in class II promoters the single CRP- and RNAP-binding site overlap, CRP making multiple contacts with RNAP. Class III promoters require multiple activator molecules, including at least one CRP dimer. It can act as an activator, repressor, coactivator or corepressor. Induces a severe bend in DNA (about 87 degrees), bringing upstream promoter elements into contact with RNAP. Acts as a negative regulator of its own synthesis as well as for adenylate cyclase (cyaA), which generates cAMP. High levels of active CRP are detrimental to growth. Plays a major role in carbon catabolite repression (CCR). CCR involves cAMP, adenylate cyclase (cyaA), CRP and the EIIA-Glc component of the PTS (crr). In the presence of glucose EIIA-Glc is dephosphorylated, and does not activate adenylate cyclase, leading to reduced cAMP and thus decreased CRP activity. Also plays a role in many other processes

Description

crp Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

Liquid. 0.03% Proclin 300, 50% Glycerol, 0.01M PBS, PH 7.4.

Specificity

Escherichia coli

Isotype

IgG

Uniprot ID

P0ACJ8

Purification

>95%, Protein G purified

Immunogen

Recombinant Escherichia coli cAMP-activated global transcriptional regulator CRP protein (1-210AA)

Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C (short-term) or -80°C (long-term). Avoid repeated freeze.

Alternative Names

Catabolite activator protein, CAP, Catabolite gene activator, cAMP receptor protein, CRP, cAMP regulatory protein, crp, cap, csm, b3357, JW5702

Application

ELISA; Recommended dilution: ELISA: 1:1000
