

p300-Ch1 (residues 302-531)

Tumor Suppressor Protein

human, recombinant, *E. coli*

Cat. No.	Amount
PR-844	10 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 20% glycerol, 100 mM KCl, 0.2 mM EDTA and 1 mM DTT.

Activity

1-5 ng are sufficient for a gel mobility shift assay in a 20 µl reaction, 50-100 ng are sufficient for reconstituted transcription assay and 100-200 ng are sufficient for a protein-protein interaction assay or an acetylation assay.

Application

Use only for research. Recombinant p300-Ch1 can be used for 1) protein-protein interaction assay, 2) *in vitro* transcription assay, 3) *in vitro* acetylation assay and 4) cell growth assay.

Purity

> 95% by SDS-PAGE

Description

Human p300 and CBP (CREB binding protein) are highly related transcriptional coactivators. Both proteins have been identified through protein interaction assays. In addition to interacting with variety of cellular factors and onco-proteins, loss of the wild type CBP alleles in isolated tumors suggests that CBP/p300 might serve as tumor suppressor. The ability of p300 to acetylate many transcription factors, including p53, E2F, TFIIIE, and TFIIIF etc. demonstrated a novel mechanism of targeted p300 regulation of gene expression.

Selected References:

- Martinez-Balbas *et al.* (2000) Regulation of E2F1 activity by acetylation. *EMBO J.* **19**:662.
Kung *et al.* (2000) Gene dose-dependent control of hematopoiesis and hematologic tumor suppression by CBP. *Genes & Dev.* **14**:272.
Gu *et al.* (1997) Activation of p53 sequence-specific DNA binding by acetylation of the p53 C-terminal domain. *Cell* **90**:595.
Imhof *et al.* (1997) Acetylation of general transcription factors by histone acetyltransferases. *Curr. Biol.* **7**:689.
Eckner *et al.* (1994) Molecular cloning and functional analysis of the adenovirus E1A-associated 300-kD protein (p300) reveals a protein with properties of a transcriptional adaptor. *Genes & Dev.* **8**:869.
Chrivia *et al.* (1993) Phosphorylated CREB binds specifically to the nuclear protein CBP. *Nature* **365**:855.
Stein *et al.* (1990) Analysis of E1A-mediated growth regulation functions: binding of the 300-kilodalton cellular product correlates with E1A enhancer repression function and DNA synthesis-inducing activity. *J. Virol.* **64**:4421.