Data sheet

IFTA AG
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DIN EN ISO 9001
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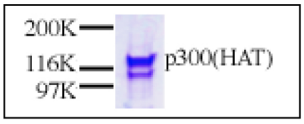
Jena Bioscience

p300 (C1135-2414)
p300 C-terminus HAT Domain
human, recombinant, Sf9 insect cells

Cat. No.	Amount
PR-770	4 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, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

Activity
50 ng are required for reconstituted transcription assays and 100 ng are required for a protein-protein interaction assay.

Application
Recombinant p300 (C-terminus) can be used for 1) protein-protein interaction assay, 2) *in vitro* transcription assay, 3) *in vitro* acetylation assay and 4) cell growth assay.

Molecular Weight
120 kDa

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 suppressors. The C-terminus of p300 contains a Histone Acetyltransferase (HAT) domain expanded from residues 1195 to 1673, an activation domain (residues 1763-1812) that interacts with many transcription factors and an SRC-1 domain further down stream of the activation domain. P300 is able to acetylate histones and many other transcription factors, including p53, E2F, TFIIE, and TFIIF etc. implicating diverse roles of p300 in gene regulation.
The C-terminus of p300 (residues 1135-2414) was expressed in baculovirus system and purified by an affinity column in combination with FPLC chromatography.

Selected References:

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.
Chrivia *et al.* (1993) Phosphorylated CREB binds specifically to the nuclear protein CBP. *Nature* **365**:855.
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.
Ogryzko *et al.* (1996) The transcriptional coactivators p300 and CBP are histone acetyltransferases. *Cell* **87**:953.
Kung *et al.* (2000) Gene dose-dependent control of hematopoiesis and hematologic tumor suppression by CBP. *Genes & Dev.* **14**:272.
Imhof *et al.*(1997) Acetylation of general transcription factors by histone acetyltransferases. *Curr. Biol.* **7**:689.
Gu *et al.* (1997) Activation of p53 sequence-specific DNA binding by acetylation of the p53 C-terminal domain. *Cell* **90**:595.
Martinez-Balbas *et al.* (2000) Regulation of E2F1 activity by acetylation. *EMBO J.* **19**:662.