

p300 recombinant protein

Recombinant p300 protein

CATALOG #
AAA60167

HOST
Baculovirus

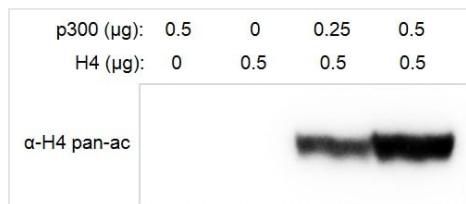
PRODUCT SYNONYMS

p300; Recombinant p300 protein; EP300; KAT3B; RSTS2; p300 recombinant protein

PRODUCT SPECIFICATIONS

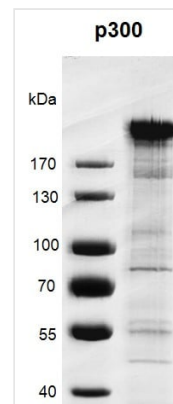
Host	Baculovirus
Form/Format	Recombinant p300 protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant p300 protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



WB (Western Blot)

Recombinant p300 protein activity assay 0.5 ug of Histone H4 were incubated with 0 (-), 12.5 (+), 25 (++), or 50 (+++) ng of p300 protein, respectively in a 20 ul reaction system including 50 mM Tris pH 8.0, 1 mM TCEP, 0.1 mM EDTA, 50 ng/ul BSA and 20 uM acetyl-CoA for 30 minutes at 30 degree C. For each reaction, 7.5 ul product was run on a 12.5% SDS-PAGE gel and detected by Western Blot. p300 only was used as negative control. H4 pan-acetyl antibody was used to recognize products.



SDS-PAGE

Recombinant p300 protein gel 8% SDS-PAGE Coomassie staining MW: 265.4 kDa Purity: >75%

ADDITIONAL INFORMATION

Related Product Information for p300 recombinant protein	Short Description: Recombinant p300 protein was expressed in a baculovirus expression system as full-length protein (accession number NP_001420.2) with an N-terminal DYKDDDDK tag. The molecular weight of the protein is 265.4 kDa. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Background: E1A binding protein p300 (EP300) or p300, also known as KAT3B or RSTS2, regulates cellular growth and differentiation and is also important in preventing tumor growth. It binds to transcription factors and functions as a coactivator of transcription. The p300 domain structure that facilitates interaction with transcription factors includes the bromodomain, the nuclear receptor interaction domain (RID), the CREB and MYB interaction domain (KIX), the cysteine/ histidine regions (TAZ1and TAZ2) and the interferon response binding domain (IBiD). Its interaction with adenovirus E1A protein is thought regulate the transforming capacity of E1A. p300 is a transcriptional coactivator with histone acetyl transferase (HAT) activity. It can acetylate all four core histones and regulates transcription via chromatin remodeling. p300 also functions as an acetyltransferase for nonhistone targets. Specifically, p300 acetylates 'Lys131' of ALX1 and acts as its coactivator in the presence of CREBBP. p300 is also thought to indirectly increase the transcriptional activity of p53 through acetylation of SIRT2 and subsequent attenuation of its deacetylase function. Additionally, HDAC1 acetylation by p300 leads to HDAC1 inactivation. p300 also acts as a TFAP2A-mediated transcriptional coactivator in the presence of CITED2 and as a coactivator of NEUROD1-dependent transcription of secretin and p21. Additionally, p300 binds to phosphorylated CREB and mediates cAMP gene regulation. It also regulates terminal differentiation of intestinal epithelial cells. In the case of HIV-1 infection, p300 is recruited by the viral protein TAT and regulates TAT's transactivating activity, and may aid induction of chromatin remodeling of proviral genes.
Product Categories/Family for p300 recombinant protein	Recombinant Proteins ; Bromodomain

NCBI AND UNIPROT INFORMATION

NCBI GI #	50345997
NCBI GeneID	2033
NCBI Accession #	NP_001420.2
NCBI GenBank Nucleotide #	NM_001429.3
UniProt Accession #	Q09472 ; B1AKC2
Molecular Weight	264,161 Da
NCBI Official Full Name	histone acetyltransferase p300
NCBI Official Synonym Full Names	E1A binding protein p300
NCBI Official Symbol	EP300
NCBI Official Synonym Symbols	p300; KAT3B; RSTS2
NCBI Protein Information	histone acetyltransferase p300; p300 HAT; E1A-binding protein, 300kD; E1A-associated protein p300
UniProt Protein Name	Histone acetyltransferase p300
UniProt Gene Name	EP300
UniProt Synonym Gene Names	P300; p300 HAT
UniProt Entry Name	EP300_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.