

p300 recombinant protein

Recombinant p300 (1041-1161) protein

CATALOG #
AAA59642

HOST
E Coli

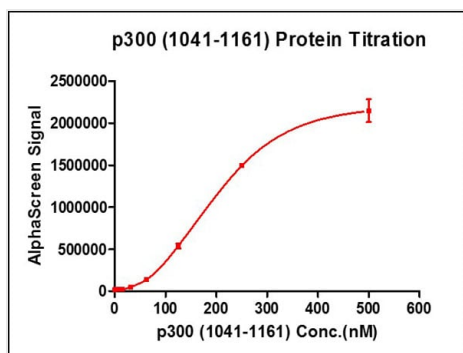
PRODUCT SYNONYMS

p300; Recombinant p300 (1041-1161) protein; EP300; KAT3B; RSTS2; p300 recombinant protein

PRODUCT SPECIFICATIONS

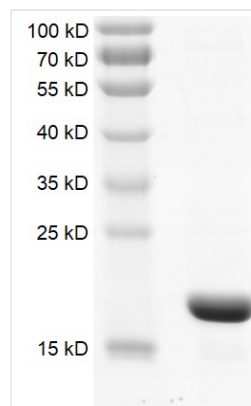
Host	E Coli
Purity/Purification	The recombinant protein is >90% pure by SDS-PAGE.
Form/Format	Recombinant p300 (1041-1161) protein expressed in E Coli and supplied in 25mM Tris pH7.4, 150mM NaCl, 5% Glycerol.
Protein Species	Human
Tag	DYKDDDDK-Tag, His-Tag
Protein Details	The peptide corresponding to amino acids 1041-1161 that contains the bromodomain sequences of EP300 (accession number NM_001429.3) was expressed in E Coli and contains an N-terminal His-Tag and C-terminal DYKDDDDK-Tag with an observed molecular weight of 19.1kDa. It shows binding specificity for acetylated H3K36, H3K56, H4K12, H4K20 and H4K44, as well as acetylated MyoD-K99/K102.
Notes	Recombinant p300 (1041-1161) is suitable for use in binding assays, 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



Application Data

Recombinant p300 (1041-1161) activity using AlphaScreen. p300 (1041-1161) titration and inhibition were assessed using an AlphaScreen assay. Titration curves were generated to show signal response in the presence of modified peptide substrate at increasing protein concentrations. This data was generated and kindly provided courtesy of ChemPartner.



SDS-PAGE

Recombinant p300 (1041-1161) protein gel. p300 (1041-1161) protein was run on a 15% SDS-PAGE gel and stained with Coomassie Blue.

ADDITIONAL INFORMATION

Related Product Information for p300 recombinant protein	Short Description: Recombinant p300 (1041-1161) protein was expressed in E Coli and contains an N-terminal His-Tag and C-terminal DYKDDDDK-Tag with an observed molecular weight of 19.1 kDa. This peptide, corresponding to amino acids 1041-1161, contains the bromodomain sequences of EP300 (accession number NM_001429.3). It shows binding specificity for acetylated H3K36, H3K56, H4K12, H4K20 and H4K44, as well as acetylated MyoD-K99/K102. E1A binding protein p300 (EP300) or p300 regulates cellular growth and differentiation, and is also important in preventing tumor growth. Its interaction with adenovirus E1A protein is thought to 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 it regulates transcription via chromatin remodeling. p300 also functions as an acetyltransferase for non-histone targets. Background: E1A binding protein p300 (EP300) or p300 regulates cellular growth and differentiation and is also important in preventing tumor growth. 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 non-histone 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. p300 contains a bromodomain that recognizes acetylated histone lysine residues and functions as a 'reader' of these epigenetic histone marks to regulate chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets.
Product Categories/Family for p300 recombinant protein	Recombinant Proteins ; Bromodomain ; Histone Acetyltransferase (HAT)

NCBI AND UNIPROT INFORMATION

NCBI GenBank Nucleotide #	NM_001429.3
Molecular Weight	Molecular weight of 19.1kDa

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.

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Online datasheet: <https://stage.aaabiotech.com/p300-recombinant-protein-e-coli/59642>