

## Active Recombinant Human EP300, His-tagged

**Cat. No.** EP300-442H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Human p300 is fused to a His-tag.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>           | Sf21 Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Description</b>      | <p>p300 functions as histone acetyltransferase and regulates transcription via chromatin remodeling. It acetylates all four core histones in nucleosomes, while the histone acetylation gives an epigenetic tag for transcriptional activation. p300 mediates cAMP-gene regulation by binding specifically to phosphorylated CREB protein. It functions as a acetyltransferase for nonhistone targets. It acetylates Lys-131 of ALX1 and acts as its coactivator in the presence of CREBBP. p300 acetylates sirtuin 2 (SIRT2) and is proposed to indirectly increase the transcriptional activity of TP53 through acetylation and subsequent attenuation of SIRT2 deacetylase function. It acetylates HDAC1 leading to its inactivation and modulation of transcription. It promotes cardiac myocyte enlargement and binds to and may be involved in the transforming capacity of the adenovirus E1A protein. In case of HIV-1 infection, it is recruited by the viral protein Tat. p300 regulates Tats transactivating activity and may help inducing chromatin remodeling of proviral genes. It acetylates FOXO1 and enhances its transcriptional activity.</p> |
| <b>Form</b>             | Liquid. In 50mM TRIS-HCl, pH 7.5, containing 100mM sodium chloride, 0.2% NP-40, 50mM imidazole and 10% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                      |                                                                                                                                    |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bio-activity</b>  | 100 ng required for acetylation assay.                                                                                             |
| <b>Purity</b>        | ≥95% (SDS-PAGE)                                                                                                                    |
| <b>Stability</b>     | Stable for at least 6 months after receipt when stored at -80°C.                                                                   |
| <b>Storage</b>       | Short Term Storage: -20°C; Long Term Storage: -80°C. After opening, prepare aliquots and store at -80°C. Avoid freeze/thaw cycles. |
| <b>Concentration</b> | Lot dependent (0.2-1.5mg/ml)                                                                                                       |

## GENE INFORMATION

|                            |                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | EP300 E1A binding protein p300 [ Homo sapiens ]                                                                                                         |
| <b>Official Symbol</b>     | EP300                                                                                                                                                   |
| <b>Synonyms</b>            | EP300; E1A binding protein p300; histone acetyltransferase p300; KAT3B; p300; p300 HAT; E1A-binding protein, 300kD; E1A-associated protein p300; RSTS2; |
| <b>Gene ID</b>             | 2033                                                                                                                                                    |
| <b>mRNA Refseq</b>         | NM_001429                                                                                                                                               |
| <b>Protein Refseq</b>      | NP_001420                                                                                                                                               |
| <b>MIM</b>                 | 602700                                                                                                                                                  |
| <b>UniProt ID</b>          | Q09472                                                                                                                                                  |
| <b>Chromosome Location</b> | 22q13.2                                                                                                                                                 |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Pathway**

ATF-2 transcription factor network, organism-specific biosystem; Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; BMAL1:CLOCK/NPAS2 Activates Circadian Expression, organism-specific biosystem; C-MYB transcription factor network, organism-specific biosystem; Cell cycle, organism-specific biosystem;

**Function**

DNA binding; NF-kappaB binding; RNA polymerase II activating transcription factor binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding; acetyltransferase activity; activating transcription factor binding; androgen receptor binding; antigen binding; beta-catenin binding; chromatin DNA binding; chromatin binding; core promoter binding; glucocorticoid receptor binding; histone acetyltransferase activity; lysine N-acetyltransferase activity; metal ion binding; mitogen-activated protein kinase binding; peroxisome proliferator activated receptor binding; protein binding; protein complex binding; transcription coactivator activity; contributes\_to transcription coactivator activity; transcription factor binding; transferase activity, transferring acyl groups; zinc ion binding;