# Anti-Human p300 Transcription Factor (MOUSE) Monoclonal Antibody - 100-301-176

**Code:** 100-301-176 **Size:** 100 µL

**Product Description:** Anti-Human p300 Transcription Factor (MOUSE) Monoclonal Antibody - 100-301-176

**Concentration:** 50.0 µg/mL by UV absorbance at 280 nm

**PhysicalState:** Liquid (sterile filtered)

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| **Label** | Unconjugated |
| **Host** | Mouse |
| **Gene Name** | EP300 |
| **Species Reactivity** | Human |
| **Buffer** | None |
| **Stabilizer** | None |
| **Preservative** | 0.01% (w/v) Sodium Azide |
| **Storage Condition** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| **Synonyms** | Histone acetyltransferase p300, p300 HAT, E1A-associated protein p300, EP300 |
| **Application Note** | This product was assayed by immunoblot and found to be reactive against p300 at a dilution of 1:10 to 1:50 followed by reaction with Peroxidase conjugated Affinity Purified anti-Mouse IgG [H&L] (Goat) code #610-1302. Anti-p300 is suitable for the detection by immunoblot of human p300. Partial reaction was observed against the CREB binding Protein (CBP). This product was also tested by immunoprecipitation and found to be reactive using 50 µl per assay. |
| **Background** | Histone acetyltransferase p300 functions as histone acetyltransferase and regulates transcription via chromatin remodeling. Acetylates all four core histones in nucleosomes. Which gives an epigenetic tag for transcriptional activation. It mediates cAMP-gene regulation by binding specifically to phosphorylated CREB protein. It mediates acetylation of histone H3 at 'Lys-122' (H3K122ac), a modification that localizes at the surface of the histone octamer and stimulates transcription, possibly by promoting nucleosome instability and mediates acetylation of histone H3 at 'Lys-27' (H3K27ac). It also functions as acetyltransferase for nonhistone targets. It acetylates 'Lys-131' of ALX1 and acts as its coactivator. It acetylates SIRT2 and is proposed to indirectly increase the transcriptional activity of TP53 through acetylation and subsequent attenuation of SIRT2 deacetylase function.and acetylates HDAC1 leading to its inactivation and modulation of transcription. p300 acts as a TFAP2A-mediated transcriptional coactivator in presence of CITED2. It plays a role as a coactivator of NEUROD1-dependent transcription of the secretin and p21 genes and controls terminal differentiation of cells in the intestinal epithelium. It promotes cardiac myocyte enlargement and can also mediate transcriptional repression. It binds to and may be involved in the transforming capacity of the adenovirus E1A protein. In the case of HIV-1 infection, it is recruited by the viral protein Tat. p300 regulates Tat's transactivating activity and may help inducing chromatin remodeling of proviral genes. It acetylates FOXO1 and enhances its transcriptional activity. It acetylates BCL6 which disrupts its ability to recruit histone deacetylases and hinders its transcriptional repressor activity. It participates in CLOCK or NPAS2-regulated rhythmic gene transcription; exhibits a circadian association with CLOCK or NPAS2, correlating with increase in PER1/2 mRNA and histone H3 acetylation on the PER1/2 promoter. It acetylates MTA1 at 'Lys-626' which is essential for its transcriptional coactivator activity. |
| **Purity And Specificity** | This product was prepared from tissue culture supernatant. |
| **Assay Dilutions** | User Optimized |
| **ELISA** | 1:5,000 - 1:25,000 |
| **Western Blot** | 1:500 - 1:3,000 |
| **Other Assays** | User Optimized |
| **Expiration** | Expiration date is one (1) year from date of opening. |
| **Immunogen** | p300 peptide corresponding to a region near the N-terminus of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH). |
| **Related Products** | |

200-301-428 Anti-SUMO (MOUSE) Monoclonal Antibody - 200-301-428

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|---|---|
| 200-401-428 | Anti-SUMO (Yeast) (RABBIT) Antibody - 200-401-428 |
| 200-401-441 | Anti-SUMO (RABBIT) Antibody - 200-401-441 |
| 200-401-491 | Anti-SUMO-3 (RABBIT) Antibody - 200-401-491 |

**Related Links**

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|---|---|
| | UniProtKB - Q09472 |
| http://www.uniprot.org/uniprot/Q09472 | |
| NCBI - Q09472.2 | http://www.ncbi.nlm.nih.gov/protein/Q09472.2 |
| | GeneID - 2033 |

## Disclaimer