p300 (H-272): sc-8981



The Power to Question

BACKGROUND

Cyclic AMP-regulated gene expression frequently involves a DNA element designated the cAMP-regulated enhancer (CRE). Many transcription factors bind to this element, including the protein CREB which is activated as a result of phosphorylation by protein kinase A. It has been shown that protein kinase A-mediated CREB phosphorylation results in its binding to a nuclear protein designated CBP (for CREB-binding protein). These findings suggest that CBP has many of the properties expected of a CREB co-activator. Another high molecular weight transcriptional adapter protein, designated p300, is characterized by three cysteine- and histidine-rich regions, of which the most carboxy terminal region specifically binds the adenovirus E1A protein. p300 molecules lacking an intact E1A binding site bypass E1A repression even in the presence of high concentrations of E1A. Sequence analysis of CBP and p300 has revealed substantial homology, arguing that these proteins are members of a conserved family of co-activators.

CHROMOSOMAL LOCATION

Genetic locus: EP300 (human) mapping to 22q13.2.

SOURCE

p300 (H-272) is a rabbit polyclonal antibody raised against amino acids 774-1045 of p300 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift or ChIP applications, sc-8981 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

p300 (H-272) is recommended for detection of p300 of human and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p300 (H-272) is also recommended for detection of p300 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for p300 siRNA (h): sc-29431, p300 shRNA Plasmid (h): sc-29431-SH and p300 shRNA (h) Lentiviral Particles: sc-29431-V.

 $\ensuremath{\mathsf{p300}}$ (H-272) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of p300: 300 kDa.

Positive Controls: MCF7 nuclear extract: sc-2149, Jurkat nuclear extract: sc-2132 or A-431 nuclear extract: sc-2122.

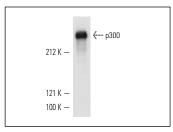
STORAGE

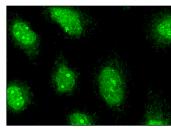
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA





p300 (H-272): sc-8981. Western blot analysis of p300 expression in KNRK nuclear extract.

p300 (H-272): sc-8981. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

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- 7. Han, S., et al. 2010. A novel bile acid-activated vitamin D receptor signaling in human hepatocytes. Mol. Endocrinol. 24: 1151-1164.
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- Su, B., et al. 2015. Interleukin-1β/linterleukin-1 receptor-associated kinase 1 inflammatory signaling contributes to persistent Gankyrin activation during hepatocarcinogenesis. Hepatology 61: 585-597.



Try **p300 (F-4):** sc-48343 or **p300 (NM11):** sc-32244, our highly recommended monoclonal aternatives to p300 (H-272). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **p300 (F-4):** sc-48343.