

EID-1 (Q-15): sc-49002

BACKGROUND

E1A-like inhibitor of differentiation-1 (EID-1), an acetyltransferase enzyme, binds both the retinoblastoma protein (Rb), a regulator of cell cycle and tissue specific transcription, and the adenovirus E1A-associated cellular p300 transcriptional co-activator protein. EID-1 inhibits cellular differentiation by blocking the histone acetyltransferase activity of p300. EID-1 also acetylates both histones and non-histone proteins such as NCoA-3 co-activator. By acetylating histones, EID-1 gives a specific tag for transcriptional activation. In addition to binding Rb and p300, EID-1 also binds to phosphorylated CREB protein, mediating cAMP gene regulation. EID-1 augments the activity of phosphorylated CREB and activates transcription of cAMP responsive genes as a co-activator.

REFERENCES

1. MacLellan, W.R., Xiao, G., Abdellatif, M. and Schneider, M.D. 2000. A novel Rb- and p300-binding protein inhibits transactivation by MyoD. *Mol. Cell Biol.* 20: 8903-8915.
2. Miyake, S., Yanagisawa, Y. and Yuasa, Y. 2003. A novel EID-1 family member, EID-2, associates with histone deacetylases and inhibits muscle differentiation. *J. Biol. Chem.* 278: 17060-17065.
3. Ledl, A., Schmidt, D. and Muller, S. 2005. Viral oncoproteins E1A and E7 and cellular LxCxE proteins repress SUMO modification of the retinoblastoma tumor suppressor. *Oncogene* 24: 3810-3818.
4. Sasajima, Y., Tanaka, H., Miyake, S. and Yuasa, Y. 2005. A novel EID family member, EID-3, inhibits differentiation and forms a homodimer or heterodimer with EID-2. *Biochem. Biophys. Res. Commun.* 333: 969-975.

CHROMOSOMAL LOCATION

Genetic locus: EID-1 (human) mapping to 15q21.1; Eid1 (mouse) mapping to 2 F1.

SOURCE

EID-1 (Q-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of EID-1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-49002 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-49002 X, 200 µg/0.1 ml.

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.

APPLICATIONS

EID-1 (Q-15) is recommended for detection of EID-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

EID-1 (Q-15) is also recommended for detection of EID-1 in additional species, including canine and porcine.

Suitable for use as control antibody for EID-1 siRNA (h): sc-60568, EID-1 siRNA (m): sc-60569, EID-1 shRNA Plasmid (h): sc-60568-SH, EID-1 shRNA Plasmid (m): sc-60569-SH, EID-1 shRNA (h) Lentiviral Particles: sc-60568-V and EID-1 shRNA (m) Lentiviral Particles: sc-60569-V.

EID-1 (Q-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of EID-1: 21 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.