

# EID-2B (G-12): sc-161551

## BACKGROUND

EID-2B (EP300 interacting inhibitor of differentiation 2B), also known as EID3 (EID-2-like inhibitor of differentiation 3), is a 161 amino acid protein that localizes to the nucleus and may exist as either a homodimer or a heterodimer with EID-2. Interacting with HDAC1 and HDAC2, EID-2B functions to repress MyoD-dependent transcription and glucocorticoid receptor (GR)-dependent transcription and may also repress muscle differentiation. The gene encoding EID-2B maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

## REFERENCES

- McKinsey, T.A., Zhang, C.L. and Olson, E.N. 2001. Control of muscle development by dueling HATs and HDACs. *Curr. Opin. Genet. Dev.* 11: 497-504.
- Ji, A., Dao, D., Chen, J. and MacLellan, W.R. 2003. EID-2, a novel member of the EID family of p300-binding proteins inhibits transactivation by MyoD. *Gene* 318: 35-43.
- 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.
- 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.
- Parham, P. 2005. Immunogenetics of killer cell immunoglobulin-like receptors. *Mol. Immunol.* 42: 459-462.

## CHROMOSOMAL LOCATION

Genetic locus: EID2B (human) mapping to 19q13.2.

## SOURCE

EID-2B (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EID-2B 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-161551 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

EID-2B (G-12) is recommended for detection of EID-2B of human 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); non cross-reactive with EID-2.

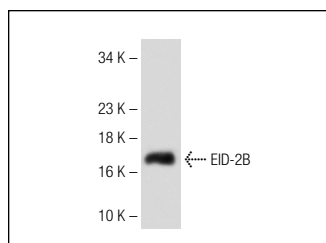
Suitable for use as control antibody for EID-2B siRNA (h): sc-97361, EID-2B shRNA Plasmid (h): sc-97361-SH and EID-2B shRNA (h) Lentiviral Particles: sc-97361-V.

Molecular Weight of EID-2B: 17 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



EID-2B (G-12): sc-161551. Western blot analysis of EID-2B expression in mouse brain tissue extract.

## RESEARCH USE

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