

# EID-2 (C-8): sc-514902

## BACKGROUND

As a regulator of transcription via chromatin remodeling, p300 is a histone acetyltransferase that binds to adenovirus E1A protein and may play a role in its transforming capacity. EID-2 (EP300-interacting inhibitor of differentiation 2), also known as CREBBP/EP300 inhibitor 2, is a 236 amino acid nuclear protein that cooperates with EID-2B to bind to the C-terminus of p300 to inhibit its activity. It also represses MYOD-dependent transcription and muscle differentiation. By interacting with SMAD2, SMAD3 and SMAD4, EID-2 selectively blocks the formation of TGF $\beta$ -induced SMAD3-SMAD4 complex, thereby repressing TGF $\beta$ /SMAD3-dependent signaling. Though it is abundantly expressed in placenta, EID-2 is highly expressed in skeletal muscle, heart, liver, brain and kidney. There are two isoforms of EID-2 that are produced as a result of alternative splicing events.

## REFERENCES

1. Miyake, S., et al. 2000. Cells degrade a novel inhibitor of differentiation with E1A-like properties upon exiting the cell cycle. *Mol. Cell. Biol.* 20: 8889-8902.
2. Brockmann, D. and Esche, H. 2003. The multifunctional role of E1A in the transcriptional regulation of CREB/CBP-dependent target genes. *Curr. Top. Microbiol. Immunol.* 272: 97-129.
3. Ji, A., et al. 2003. EID-2, a novel member of the EID family of p300-binding proteins inhibits transactivation by MyoD. *Gene* 318: 35-43.

## CHROMOSOMAL LOCATION

Genetic locus: EID2 (human) mapping to 19q13.2; Eid2 (mouse) mapping to 7 A3.

## SOURCE

EID-2 (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 110-138 within an internal region of EID-2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EID-2 (C-8) is available conjugated to agarose (sc-514902 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514902 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514902 PE), fluorescein (sc-514902 FITC), Alexa Fluor® 488 (sc-514902 AF488), Alexa Fluor® 546 (sc-514902 AF546), Alexa Fluor® 594 (sc-514902 AF594) or Alexa Fluor® 647 (sc-514902 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514902 AF680) or Alexa Fluor® 790 (sc-514902 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514902 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

EID-2 (C-8) is recommended for detection of EID-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for EID-2 siRNA (h): sc-97371, EID-2 siRNA (m): sc-144607, EID-2 shRNA Plasmid (h): sc-97371-SH, EID-2 shRNA Plasmid (m): sc-144607-SH, EID-2 shRNA (h) Lentiviral Particles: sc-97371-V and EID-2 shRNA (m) Lentiviral Particles: sc-144607-V.

Molecular Weight of EID-2: 25 kDa.

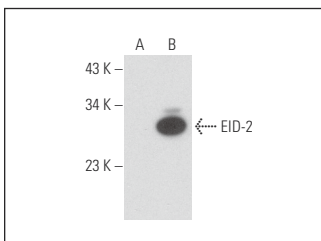
Positive Controls: EID-2 (m): 293T Lysate: sc-126774 or OVCAR-3 whole cell lysate.

## RECOMMENDED SUPPORT REAGENTS

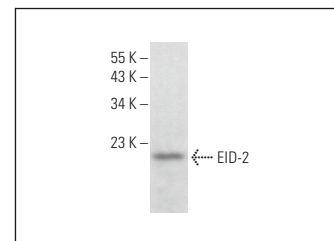
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



EID-2 (C-8): sc-514902. Western blot analysis of EID-2 expression in non-transfected: sc-117752 (A) and mouse EID-2 transfected: sc-126774 (B) 293T whole cell lysates.



EID-2 (C-8): sc-514902. Western blot analysis of EID-2 expression in OVCAR-3 whole cell lysate.

## 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.

## PROTOCOLS

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