BACKGROUND

SMAD regulates gene expression by interacting with different classes of transcription factors including DNA-binding multi-zinc finger proteins. ZEB2 (zinc finger E-box-binding protein 2) is a member of the δ-EF1/Zfh1 family of 2-handed zinc finger/homeodomain proteins. ZEB2 contains a SMAD-binding domain, a homeodomain and two clusters of zinc fingers on the N- and C- termini. ZEB2, also known as SMADIP1, ZFHX1B and SIP1 (SMAD interacting protein 1), may be induced by TGFβ treatment. ZEB2 plays a crucial role in normal embryonic development of neural structures and neural crest. The human ZEB2 gene maps to chromosome 2q22.3. Mutations in the ZEB2 gene cause a form of Hirschsprung disease (HSCR). Patients with ZEB2 mutations show mental retardation, delayed motor development, epilepsy, microcephaly, distinct facial features and/or congenital heart disease, all symptoms of HSCR.

CHROMOSOMAL LOCATION

Genetic locus: ZEB2 (human) mapping to 2q22.3; Zeb2 (mouse) mapping to 2B.

SOURCE

ZEB2 (E-11) is a mouse monoclonal antibody raised against amino acids 401-660 mapping within an internal region of ZEB2 of human origin.

PRODUCT

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZEB2 (E-11) is available conjugated to agarose (sc-271984 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271984 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-271984 PE), fluorescein (sc-271984 FITC), Alexa Fluor® 488 (sc-271984 AF488) or Alexa Fluor® 647 (sc-271984 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

ZEB2 (E-11) is recommended for detection of ZEB2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ZEB2 siRNA (h): sc-38641, ZEB2 siRNA (m): sc-38642, ZEB2 shRNA Plasmid (h): sc-38641-SH, ZEB2 shRNA Plasmid (m): sc-38642-SH, ZEB2 shRNA (h) Lentiviral Particles: sc-38641-V and ZEB2 shRNA (m) Lentiviral Particles: sc-38642-V.

Molecular Weight of ZEB2: 157 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, RAW 264.7 whole cell lysate: sc-2211 or EOC 20 whole cell lysate: sc-364187.

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

SELECT PRODUCT CITATIONS


PROTOCOLS

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