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 β-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 2 B.

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; to either phycoerythrin (sc-271984 PE), fluorescein (sc-271984 FITC), Alexa Fluor® 488 (sc-271984 AF488), Alexa Fluor® 546 (sc-271984 AF546), Alexa Fluor® 594 (sc-271984 AF594) or Alexa Fluor® 647 (sc-271984 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271984 AF680) or Alexa Fluor® 790 (sc-271984 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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).

Molecular Weight of ZEB2: 157 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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

SELECT PRODUCT CITATIONS

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

DATA
ZEB2 (E-11): sc-271984. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

RESEARCH USE
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