

EED (U-22): sc-133537

BACKGROUND

The transcriptional repressing Polycomb-group (PcG) and transcriptional activating trithorax-group (trxG) genes of *Drosophila* are part of a cellular memory system responsible for the stable inheritance of gene activity. PcG proteins assemble into multimeric protein complexes, which are involved in maintaining the transcriptional repressive state of genes over successive cell generations. EED (embryonic ectoderm development) is the human homolog of Eed, a murine PcG gene homologous to the *Drosophila* homeotic gene extra sex combs. The human EED protein is 99.5% identical to the mouse EED protein and contains seven WD repeats, which are involved in protein-protein interactions. There are two human EED transcripts that contain a putative 407 nucleotide long intron and give rise to two HEED protein isoforms, 535 and 494 amino acids in length. EED interacts in a highly specific manner, both *in vitro* and *in vivo*, with histone deacetylase (HDAC) proteins.

CHROMOSOMAL LOCATION

Genetic locus: EED (human) mapping to 11q14.2; Eed (mouse) mapping to 7 E1.

SOURCE

EED (U-22) is an affinity purified rabbit polyclonal antibody raised against synthetic peptide mapping near the N-terminus of EED of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

EED (U-22) is recommended for detection of EED of mouse, rat, human and zebrafish 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EED (U-22) is also recommended for detection of EED in additional species, including equine, bovine and canine.

Suitable for use as control antibody for EED siRNA (h): sc-37823, EED siRNA (m): sc-37824, EED shRNA Plasmid (h): sc-37823-SH, EED shRNA Plasmid (m): sc-37824-SH, EED shRNA (h) Lentiviral Particles: sc-37823-V and EED shRNA (m) Lentiviral Particles: sc-37824-V.

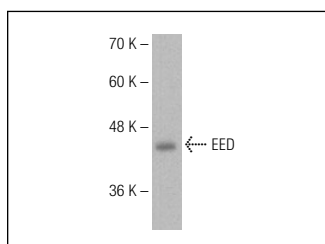
Molecular Weight of EED isoforms 1/2/3: 50/53/46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or mouse embryo extract: sc-364239.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



EED (U-22): sc-133537. Western blot analysis of EED expression in Hep G2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Song, P.P., et al. 2011. Embryonic ectoderm development protein is regulated by microRNAs in human neural tube defects. *Am. J. Obstet. Gynecol.* 204: e9-e17.
2. Wu, H., et al. 2011. Dual functions of Tet1 in transcriptional regulation in mouse embryonic stem cells. *Nature* 473: 389-393.

RESEARCH USE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **EED (3B12): sc-293203**, our highly recommended monoclonal alternative to EED (U-22).