

EDRF1 (E-13): sc-164257

BACKGROUND

The tetratricopeptide repeat (TPR) motif is a degenerate, 34 amino acid sequence found in many proteins and acts to mediate protein-protein interactions in various pathways. At the sequence level, there can be up to 16 tandem TPR repeats, each of which has a helix-turn-helix shape that stacks on other TPR repeats to achieve ligand binding specificity. EDRF1 (erythroid differentiation-related factor 1), also known as C10orf137 (chromosome 10 open reading frame 137), is a 1,238 amino acid protein containing 2 TPR repeats. Localizing to nucleus, EDRF1 is involved in transcriptional activation of globin genes by regulating DNA-binding activity of GATA-1 transcription factor. EDRF1 may also play an important role in organ development and histological differentiation. EDRF1 exists as four alternatively spliced isoforms and is encoded by a gene mapping to human chromosome 10q26.13.

REFERENCES

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4. Wang, D., Li, Y. and Shen, B. 2002. A novel erythroid differentiation related gene EDRF1 upregulating globin gene expression in HEL cells. *Chin. Med. J.* 115: 1701-1705.
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CHROMOSOMAL LOCATION

Genetic locus: C10orf137 (human) mapping to 10q26.13; 2700050L05Rik (mouse) mapping to 7 F3.

SOURCE

EDRF1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EDRF1 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-164257 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EDRF1 (E-13) is recommended for detection of EDRF1 of mouse, rat and 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).

Suitable for use as control antibody for EDRF1 siRNA (h): sc-90722, EDRF1 siRNA (m): sc-143298, EDRF1 shRNA Plasmid (h): sc-90722-SH, EDRF1 shRNA Plasmid (m): sc-143298-SH, EDRF1 shRNA (h) Lentiviral Particles: sc-90722-V and EDRF1 shRNA (m) Lentiviral Particles: sc-143298-V.

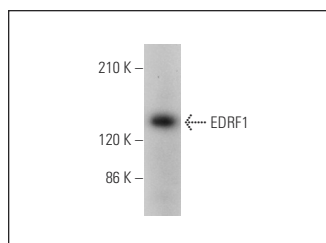
Molecular Weight of EDRF1 isoforms: 139/89 kDa.

Positive Controls: human brain tissue extract.

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



EDRF1 (E-13): sc-164257. Western blot analysis of EDRF1 expression in human brain tissue extract.

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 or our catalog for detailed protocols and support products.