

EPDR1 (D-14): sc-162763

BACKGROUND

EPDR1 (ependymin related protein 1), also known as EPDR, UCC1 (up-regulated in colorectal cancer gene 1 protein), MERP1 or MERP-1 (mammalian ependymin-related protein 1 precursor), is a 244 amino acid type II transmembrane protein that is a member of the ependymin family. EPDR1 is expressed in various normal tissues with highest expression in adult bone marrow and umbilical cord. EPDR1 has a notable sequence similarity to ependymins (piscine glycoproteins that are synthesized in fibroblasts and secreted into cerebrospinal fluid), suggesting a conserved role between species. EPDR1 contains two glycosylation sites and a signal peptide and is thought to play a role in calcium-dependent cell adhesion. Two isoforms of EPDR1 exist due to alternative splicing events.

REFERENCES

1. Nimrich, I., et al. 2001. The novel ependymin related gene UCC1 is highly expressed in colorectal tumor cells. *Cancer Lett.* 165: 71-79.
2. Gregorio-King, C.C., et al. 2002. MERP1: a mammalian ependymin-related protein gene differentially expressed in hematopoietic cells. *Gene* 286: 249-257.
3. Della Valle, M.C., et al. 2006. Demonstration of lysosomal localization for the mammalian ependymin-related protein using classical approaches combined with a novel density shift method. *J. Biol. Chem.* 281: 35436-35445.
4. Bradley, S.P., et al. 2006. Gene expression profiles characterize early graft response in living donor small bowel transplantation: a case report. *Transplant. Proc.* 38: 1742-1743.
5. SWISS-PROT/TrEMBL (Q9UM22). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: EPDR1 (human) mapping to 7p14.1; Epdrl (mouse) mapping to 13 A2.

SOURCE

EPDR1 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EPDR1 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-162763 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

EPDR1 (D-14) is recommended for detection of EPDR1 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).

EPDR1 (D-14) is also recommended for detection of EPDR1 in additional species, including equine and bovine.

Suitable for use as control antibody for EPDR1 siRNA (h): sc-89709, EPDR1 siRNA (m): sc-144906, EPDR1 shRNA Plasmid (h): sc-89709-SH, EPDR1 shRNA Plasmid (m): sc-144906-SH, EPDR1 shRNA (h) Lentiviral Particles: sc-89709-V and EPDR1 shRNA (m) Lentiviral Particles: sc-144906-V.

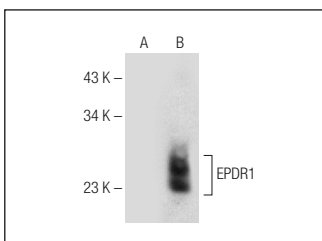
Molecular Weight of EPDR1: 25 kDa.

Positive Controls: EPDR1 (h): 293 Lysate: sc-112322.

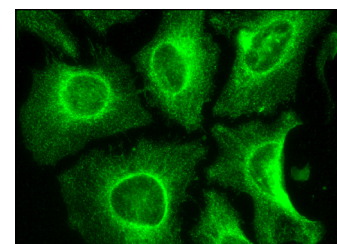
RECOMMENDED SECONDARY REAGENTS

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



EPDR1 (D-14): sc-162763. Western blot analysis of EPDR1 expression in non-transfected: sc-110760 (A) and human EPDR1 transfected: sc-112322 (B) 293 whole cell lysates.



EPDR1 (D-14): sc-162763. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization.

RESEARCH USE

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