

EDG-5 (H-18): sc-31577

BACKGROUND

The EDG (endothelial differentiation gene) family of G protein coupled receptors consists of eight family members that bind lysophospholipid (LPL) mediators, including sphingosine-1-phosphate (SPP) and lysophosphatidic acid (LPA). EDG-1, EDG-3, EDG-5 (also designated H218 and AGR16) and EDG-8 bind SPP with high-affinity. EDG-6 is a low-affinity receptor for SPP. LPA preferentially binds to EDG-2, EDG-4 and EDG-7. The EDG receptors couple to multiple G proteins to signal through Ras, MAP kinase, Rho, Phospholipase C or other tyrosine kinases, which lead to cell survival, growth, migration and differentiation. EDG-1 signals through G_i proteins to activate Akt and is expressed in glioma cells. EDG-2 is expressed in brain, especially in white matter tract regions, while EDG-3 is expressed in cardiovascular tissue and in cerebellum. EDG-4 is highly expressed on leukocytes and brain, and EDG-5 has wide tissue distribution, including cardiovascular tissue and brain. Expressed in lymphoid and hematopoietic tissues and in lung, EDG-6 signals through G_{i/o} proteins, which activate growth related pathways.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: S1PR2 (human) mapping to 19p13.2; S1pr2 (mouse) mapping to 9 A3.

SOURCE

EDG-5 (H-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of EDG-5 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-31577 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EDG-5 (H-18) is recommended for detection of EDG-5 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).

EDG-5 (H-18) is also recommended for detection of EDG-5 in additional species, including equine, canine, bovine and porcine.

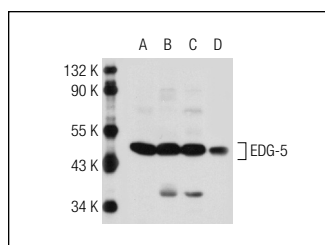
Suitable for use as control antibody for EDG-5 siRNA (h): sc-39928, EDG-5 siRNA (m): sc-39929, EDG-5 shRNA Plasmid (h): sc-39928-SH, EDG-5 shRNA Plasmid (m): sc-39929-SH, EDG-5 shRNA (h) Lentiviral Particles: sc-39928-V and EDG-5 shRNA (m) Lentiviral Particles: sc-39929-V.

Molecular Weight (predicted) of EDG-5: 39 kDa.

Molecular Weight (observed) of EDG-5: 39/48 kDa.

Positive Controls: ECV304 cell lysate: sc-2269, CCD-1064Sk cell lysate: sc-2263 or A-10 cell lysate: sc-3806.

DATA



EDG-5 (H-18): sc-31577. Western blot analysis of EDG-5 expression in A-10 (A), CCD-1064Sk (B), ECV304 (C) and C2C12 (D) whole cell lysates.

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.

MONOS
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Try **EDG-5 (E-12): sc-365963** or **EDG-5 (F-3): sc-365589**, our highly recommended monoclonal alternatives to EDG-5 (H-18).