

EDG-7 (K-19): sc-16090

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.

CHROMOSOMAL LOCATION

Genetic locus: EDG7 (human) mapping to 1p22.3; Edg7 (mouse) mapping to 3 H2.

SOURCE

EDG-7 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EDG-7 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-16090 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EDG-7 (K-19) is recommended for detection of EDG-7 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-7 (K-19) is also recommended for detection of EDG-7 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EDG-7 siRNA (h): sc-37088, EDG-7 siRNA (m): sc-37089, EDG-7 shRNA Plasmid (h): sc-37088-SH, EDG-7 shRNA Plasmid (m): sc-37089-SH, EDG-7 shRNA (h) Lentiviral Particles: sc-37088-V and EDG-7 shRNA (m) Lentiviral Particles: sc-37089-V.

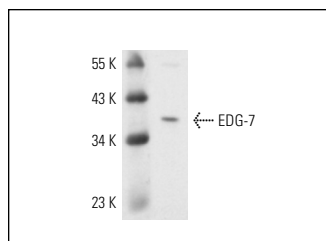
Molecular Weight of EDG-7: 40 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or SK-N-MC cell lysate: sc-2237.

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



EDG-7 (K-19): sc-16090. Western blot analysis of EDG-7 expression in SK-N-MC whole cell lysate.

SELECT PRODUCT CITATIONS

1. Matsumoto, N., et al. 2010. Pivotal role of actin depolymerization in the regulation of cochlear outer hair cell motility. *Biophys. J.* 99: 2067-2076.

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
Satisfation
Guaranteed

Try **EDG-7 (C-7): sc-390270**, our highly recommended monoclonal alternative to EDG-7 (K-19).