SANTA CRUZ BIOTECHNOLOGY, INC.

EDG-1 (Z47-1): sc-73923

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: EDG1 (human) mapping to 1p21; Edg1 (mouse) mapping to 3 G1.

SOURCE

EDG-1 (Z47-1) is a mouse monoclonal antibody raised against NS-0 cells transfected with EDG-1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

EDG-1 (Z47-1) is recommended for detection of EDG-1, also designated endothelial differentiation gene-1, of human origin by flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for EDG-1 siRNA (h): sc-37086.

Molecular Weight of EDG-1: 38 kDa.

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.