

EDG6 (S1P₄) (C Terminal), FITC Conjugate. Mouse Monoclonal Antibody 1 , Human

Endothelial cell differentiation gene 6 C-terminal; Sphingosine-1-Phosphate Receptor-4 (S1P₄)

BACKGROUND

EDG6 (S1P₄) belongs to a family of G-protein coupled receptors whose ligands are lysophospholipids. The ligand for EDG6 (S1P₄) is sphingosine-1-phosphate. There are 8 known members of the EDG receptor family and they are implicated in mediating growth related effects such as induction of cellular proliferation, alterations in differentiation and survival and suppression of apoptosis. They also evoke cellular effector functions that are dependent on cytoskeletal responses such as contraction, secretion, adhesion and chemotaxis. EDG receptors are developmentally regulated and differ in tissue distribution. They couple to multiple types of G proteins to signal through ras and MAP kinase, rho, phospholipase C and several protein tyrosine kinases. EDG6 (S1P₄) is expressed in lymphoid and hematopoietic tissue and in the lungs.

Recently, the designation of the EDG receptors has been modified to include the ligand for the receptor. Thus, the new designation for the EDG6 (S1P₄) receptor is the sphingosine 1-phosphate receptor-4 (S1P₄).

ORDERING INFORMATION

CATALOG NUMBER

X1626M

SIZE

100 µg

FORM

FITC

HOST/CLONE

Mouse Clone 1

FORMULATION

Provided in phosphate buffered saline solution containing 1% BSA and 0.1% antimycotic as a preservative

CONCENTRATION

1 mg/ml

ISOTYPE

IgG1

APPLICATIONS

Western Blot, Flow Cytometry

IMMUNOGEN

Hybridoma produced by the fusion of splenocytes from mice immunized with Unique synthetic peptide derived from the C-terminal of the EDG6 (S1P₄) protein and mouse myeloma cells.

SPECIES REACTIVITY

Human

COMMENTS

Antibody can be used for flow cytometry (use 1 µg of antibody per 10⁶ cells). **NOTE:** Epitope for the antibody is the C-terminal of the EDG6 protein. The C-terminal is an intracellular region and cells need to be permeabilized prior to staining with antibody. Optimal concentration should be evaluated by serial dilutions.

STORAGE CUSTOMER

Product should be stored at 4–8°C. DO NOT FREEZE

STABILITY

Products are stable for one year from purchase when stored properly

For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL

Not Available

SHIP CONDITIONS

Ship at ambient temperature, do not freeze, refrigerate upon arrival

REFERENCES

1. Yamazaki, Y., et al. "EDG-6 as a putative sphingosine 1-phosphate receptor coupling to Ca(2+) signaling pathway." *Biochem. Biophys. Res. Commun.* 2000, 268, 583–589.
2. Van Brocklyn, J.R., et al. "Sphingosine 1-phosphate is a ligand for the G protein-coupled receptor EDG-6." *Blood* 2000, 95, 2624–2629.
3. Takuwa, Y., et al. "Subtype-specific, differential activities of the EDG family receptors for sphingosine 1-phosphate, a novel lysophospholipid mediator." *Mol. Cell Endocrinol.* 2001, 177, 3–11.

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