

Sphingosine 1 Phosphate 4 Receptor (CT) (EDG6). Mouse Monoclonal Antibody

Endothelial cell differentiation gene 6 C-terminal; Sphingosine-1-Phosphate Receptor-4 (S1P₄), (S1P4) (Sphingosine 1-phosphate receptor Edg-6, S1P receptor Edg-6, Endothelial differentiation G-protein coupled receptor 6, S1PR4, EDG6

BACKGROUND

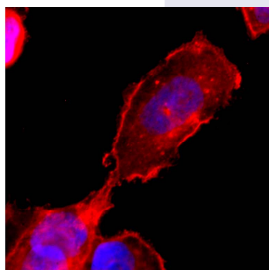
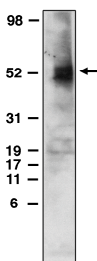
EDG6 (S1P₄) belongs to a family of G-protein coupled receptors whose ligands are lysophospholipids. The ligand for EDG6 (S1P₄) is sphingosine -1-phosphate. There are 8 known members of the EDG receptor family and they are implicated in mediating growth related effects such as induction of cellular proliferation, 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).

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.

Immunofluorescence on transiently transfected CHO cells. Developed with Cy5 anti-mouse, nuclei are stained with DAPI.



ORDERING INFORMATION

CATALOG NUMBER
X1533M

SIZE
100 µg
FORM
Unconjugated

HOST/CLONE
Mouse Clone 1

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
See vial for concentration

ISOTYPE
IgG1

APPLICATIONS
Western Blot, Flow Cytometry

SPECIES REACTIVITY
Human

ACCESSION NUMBER
Human O95977

POSITIVE CONTROL/TISSUE EXPRESSION

RH7777 cells transfected with EDG6 (S1P4) protein (Cat. No. X1311C)

COMMENTS

This antibody can be used for Western blotting (5-10 $\mu\text{g/ml}$), Immunofluorescence and Flow Cytometry. Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Protein A/G Chromatography

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C . Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Yamazaki, Y., et al. 'EDG-6 as a putative sphingosine 1-phosphate receptor coupling to $\text{Ca}(2+)$ 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.
4. Ohotski, J., et al. Expression of sphingosine 1-phosphate receptor 4 and sphingosine kinase 1 is associated with outcome in oestrogen receptor-negative breast cancer. *Br. J. Can.* (2012), 106, 1453-1459

PRODUCT SPECIFIC REFERENCES