

Sphingosine 1 Phosphate 4 Receptor (CT) (EDG6). Rabbit Polyclonal Antibody Human

Endothelial cell differentiation gene 6 C-terminal; Sphingosine-1-Phosphate Receptor-4 (S1P-4)

BACKGROUND

EDG-6 belongs to a family of G-protein coupled receptors whose ligands are lysophospholipids. The ligand for EDG-6 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. EDG-6 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 EDG-6 receptor is the sphingosine 1-phosphate receptor-4 (S1P-4).

ORDERING INFORMATION

CATALOG NUMBER
X1182P

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Rabbit

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

CONCENTRATION
1 mg/ml

ISOTYPE

APPLICATIONS
Western Blot

IMMUNOGEN

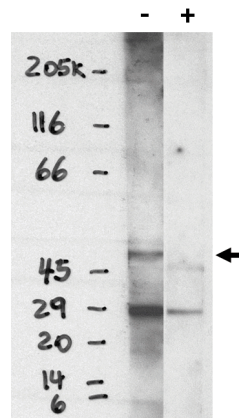
Synthetic peptide derived from the C-terminal of the EDG-6 receptor

SPECIES REACTIVITY

Human

Legend:

Western blot analysis using EDG6 (S1P4) antibody on RH7777 cells transfected with EDG6 (S1P4) protein in the presence (1) and absence (+) of specific blocking peptide.



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POSITIVE CONTROL/TISSUE EXPRESSION

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

COMMENTS

Detects EDG6 receptors at concentration of 5-10 $\mu\text{g/ml}$ by Western blot using a human EDG6 receptor transfected cell line. Detects an approximately 45 kDa band in Cos cells transfected with full length human EDG6. Due to low expression of EDG receptors, we recommend use of Pierce Femto Signal substrate for western blot development. Optimal concentration should be evaluated by serial dilutions.

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.

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