



Rabbit (polyclonal) Anti-Human EDG-1

PRODUCT ANALYSIS SHEET

Catalog Number:	AHR1011
Lot Number:	See product label
Quantity/Volume:	0.1 mg/0.1 mL
Form of the Antibody:	Purified immunoglobulins in phosphate buffered saline, pH 7.4.
Preservation:	0.08% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	Purified from rabbit serum by ammonium sulfate precipitation. Sterile filtered (0.2 µm).
Immunogen:	Synthetic peptide corresponding to the C terminal region of the human EDG-1 protein.
Specificity:	<p>Endothelial Cell Differentiation Gene-1, or EDG-1, encodes a 44 kDa protein belonging to a family of G-Protein Coupled Receptors (GPCR's) which bind lysophospholipids. To date, 8 members of the EDG receptor family have been identified. These receptors are suggested to have a role in modulation of growth-related effects including cell proliferation and differentiation as well as protective, anti-apoptotic effects. EDG receptor expression is developmentally regulated and the expression of the 8 members of this family of proteins appears to be tissue specific. EDG receptors couple to G-proteins to signal through Ras and MAPK pathways and other protein tyrosine kinase pathways.</p> <p>EDG-1 is also known as S1P₁. The ligand for EDG-1 is sphingosine-1-phosphate. EDG-1 is expressed predominantly by endothelial cells, as wells as epithelial, neuronal, and cardiovascular cells, but is completely absent from T-lymphocytes. EDG-1 appears to be important in PDGF-mediated chemotaxis with embryonic fibroblasts. EDG-1 plays a major role in neuronal function, development and pathology.</p>
Species Reactivity:	Human. Other species were not tested.
Applications:	This antibody is suitable for use in Western blotting.
Suggested Working Dilutions:	The recommended concentration for use in Western blotting is 5-10 µg/mL. The optimal concentration should be determined for each specific application.
Storage:	Store at -20°C. Upon initial thawing, apportion the antibody into working aliquots and store at -20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.
Expiration Date:	Expires one year from date of receipt when stored as instructed.

This product is for research use only. Not for use in diagnostic procedures.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI AHR1011

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

References:

Goetzl, E.J. and S. An (1998) Diversity of cellular receptors and functions for the lysophospholipid growth factors lysophosphatidic acid and sphingosine 1-phosphate. *FASEB J.* 12(15):1589-1598.

Hla, T., M.J. Lee, N. Ancellin, J.H. Paik, and M.J. Kluk (2001) Lysophospholipids– Receptor revelations. *Science* 294:1875-1878 (Review).

Liu, Y., R. Wada, T. Yamashita, Y. Mi, C.X. Deng, J.P. Hobson, H.M. Rosenfeldt, V.E. Nava, S.S. Chae, M.J. Lee, C.H. Liu, T. Hla, S. Spiegel, and R.L. Proia (2000) Edg-1, the G protein-coupled receptor for sphingosine-1-phosphate, is essential for vascular maturation. *J. Clin. Invest.* 106(8):951-961.

Nakajima, N., A.L. Cavalli, D. Biral, C.C. Glembotski, P.M. McDonough, P.D. Ho, R. Betto, D. Sandona, P.T. Palade, C.A. Dettbarn, R.E. Klepper, and R.A. Sabbadini (2000) Expression and characterization of Edg-1 receptors in rat cardiomyocytes: calcium deregulation in response to sphingosine 1-phosphate. *Eur. J. Biochem.* 267(18):5679-5686.

This product is for research use only. Not for use in diagnostic procedures.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI AHR1011

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.