



Anti-Endothelial differentiation, sphingolipid G-protein-coupled receptor 2(EDG2), Rabbit-Polyclonal Antibody

Catalog No. GB-30084
Antigen species: Human
Host species: Rabbit

Quantity: 100 μ g
Reactivity: Human
Form: Peptide affinity purified antibody

Applications: ELISA

Target description

The integral membrane protein (EDG2) is a lysophosphatidic acid (LPA) receptor from a group known as EDG receptors. These receptors are members of the G protein-coupled receptor superfamily. Utilized by LPA for cell signaling, EDG receptors mediate diverse biologic functions, including proliferation, platelet aggregation, smooth muscle contraction, inhibition of neuroblastoma cell differentiation, chemotaxis, and tumor cell invasion. Alternative splicing of this gene has been observed and two transcript variants have been described, each encoding identical proteins. An alternate translation start codon has been identified, which results in isoforms differing in the N-terminal extracellular tail. In addition, an alternate polyadenylation site has been reported.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located on the putative extracellular domain of human EDG2.

Application

The antibody specificity was assayed by ELISA with the synthetic EDG2 peptide antigen. The antibody titer is more than 50K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1,000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/50 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/30 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti- endothelial differentiation, sphingolipid G-protein-coupled receptor, 1 (EDG1), pAb (GB-30083)
2. Anti- endothelial differentiation, sphingolipid G-protein-coupled receptor, 3 (EDG3), pAb (GB-30085)
3. Anti- endothelial differentiation, sphingolipid G-protein-coupled receptor, 5 (EDG5), pAb (GB-30104)

Ab dilution	Pre-bleed	Purified-Ab
1:100	1.170	2.333
1:1,000	0.327	1.945
1:10,000	0.098	0.772
1:100,000	0.058	0.159
1:1,000,000	0.055	0.065
Titer		100K

Antigen is coated on EIA strips at 1 μ g per well.

ELISA Protocol

Add 200 μ l of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-30084 is diluted in series as $10^2 \sim 10^6$ folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody is positive at >2 folds of ABS of control/Pre-Immune serum.

Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1 \times PBS). Store at 4 $^{\circ}$ C for short-term application. For long-term storage, aliquot and store at -20 $^{\circ}$ C.

References

1. Matsuda, A., Suzuki, Y., Honda, G., Muramatsu, S., Matsuzaki, O., Nagano, Y., Doi, T., Shimotohno, K., Harada, T., Nishida, E., Hayashi, H. and Sugano, S. Large-scale identification and characterization of human genes that activate NF-kappaB and MAPK signaling pathways. *Oncogene* 22 (21): 3307-3318, 2003.
2. Murph, M.M., Scaccia, L.A., Volpicelli, L.A. and Radhakrishna, H. Agonist-induced endocytosis of lysophosphatidic acid-coupled LPA1/EDG-2 receptors via a dynamin2- and Rab5-dependent pathway. *J. Cell. Sci.* 116 (Pt 10): 1969-1980, 2003.