



## Anti-Endothelial differentiation, sphingolipid G-protein-coupled receptor1 (EDG1), Rabbit-Polyclonal Antibody

**Catalog No.** GB-30083  
**Antigen species:** Human  
**Host species:** Rabbit

**Quantity:** 100 $\mu$ g  
**Reactivity:** Human  
**Form:** Peptide affinity purified antibody

**Applications:** ELISA

### Target description

Homo sapiens endothelial differentiation, sphingolipid G-protein-coupled receptor, 1 (EDG1) is structurally similar to G protein-coupled receptors and is highly expressed in endothelial cells. It binds the ligand sphingosine-1-phosphate with high affinity and high specificity, and suggested to be involved in the processes that regulate the differentiation of endothelial cells. Activation of this receptor induces cell-cell adhesion.

### Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located on the putative extracellular domain of human EDG1.

### Application

The antibody specificity was assayed by ELISA with the synthetic EDG1 peptide antigen. The antibody titer is 97K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/3,000 dilution for ELISA, 1/500 dilution for Western blot analysis (WB) of recombinant protein, 1/200 dilution for tissue extracts or cell lysates, 1/50 dilution for immuno-histochemistry (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, 2 (EDG2), pAb (GB-30084)
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	0.122	1.021
1:1,000	0.112	1.035
1:10,000	0.104	0.479
1:100,000	0.091	0.182
1:1,000,000	0.100	0.172
<b>Titer</b>		<b>97K</b>

Antigen is coated on EIA strips at 1 $\mu$ g per well.

### ELISA Protocol

Add 200 $\mu$ l of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-30083 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. Heringdorf, D.M., Vincent, M.E., Lipinski, M., Danneberg, K., Stropp, U., Ang, D.A., Tigyi, G. and Jakobs, K.H. Inhibition of Ca(2+) signalling by the sphingosine 1-phosphate receptor S1P(1). *Cell. Signal.* 15 (7): 677-687, 2003.
2. Dorsam, G., Graeler, M.H., Seroogy, C., Kong, Y., Voice, J.K. and Goetzl, E.J. Transduction of multiple effects of sphingosine 1-phosphate (S1P) on T cell functions by the S1P1 G protein-coupled receptor. *J. Immunol.* 171 (7): 3500-3507, 2003.

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