

DESCRIPTION

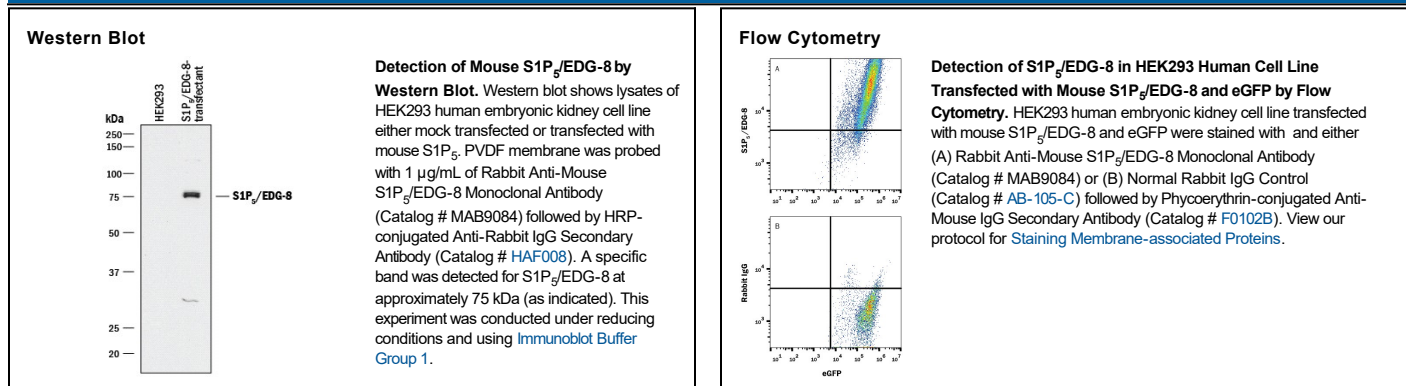
| | |
|---------------------------|---|
| Species Reactivity | Mouse |
| Specificity | Detects mouse S1P ₅ /EDG-8 in Western blots. |
| Source | Recombinant Monoclonal Rabbit IgG Clone # 1196A |
| Purification | Protein A or G purified from cell culture supernatant |
| Immunogen | Mouse S1P ₅ /EDG-8 peptide corresponding to the N-terminal extracellular sequence Accession # Q91X56 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------|-------------------------------|-----------|
| Western Blot | 1 µg/mL | See Below |
| Flow Cytometry | 0.25 µg/10 ⁶ cells | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

S1P₅ (Sphingosine-1 Phosphate receptor 5), also known as EDG-8 (Endothelial Differentiation Gene 8), is a 43-45 kDa member of the EDG family, S1P-binding subfamily of GPCRs. Along with S1P₁-S1P₄ (or EDG-1, EDG-5, EDG-3 and EDG-6, respectively), S1P₅ is known to bind S1P, a lipid synthesized by platelets, neutrophils, smooth muscle cells, mast cells and select fibroblasts. Mouse S1P₅ is a 400 amino acid (aa) 7-transmembrane glycoprotein that is expressed on brain endothelium, renal mesangial cells, Ly6C⁺ (in human CD14⁺CD116⁺) monocytes, pre- and mature oligodendrocytes, and CD27⁺CD116⁺ (mature) NK cells. S1P₅ appears to play a role in cell trafficking. On monocytes and NK cells, S1P₅ promotes cell migration out of the bone marrow, a phenomenon that may not be related to an S1P concentration gradient. S1P₅ also helps maintain the integrity of the blood-brain-barrier. On oligodendrocytes and precursors, S1P₅ appears to regulate cell survival and pseudopod extension. The extracellular segment of mouse S1P₅ shares 96% and 94% aa sequence identity with rat and human S1P₅ extracellular domains, respectively.