

## DESCRIPTION

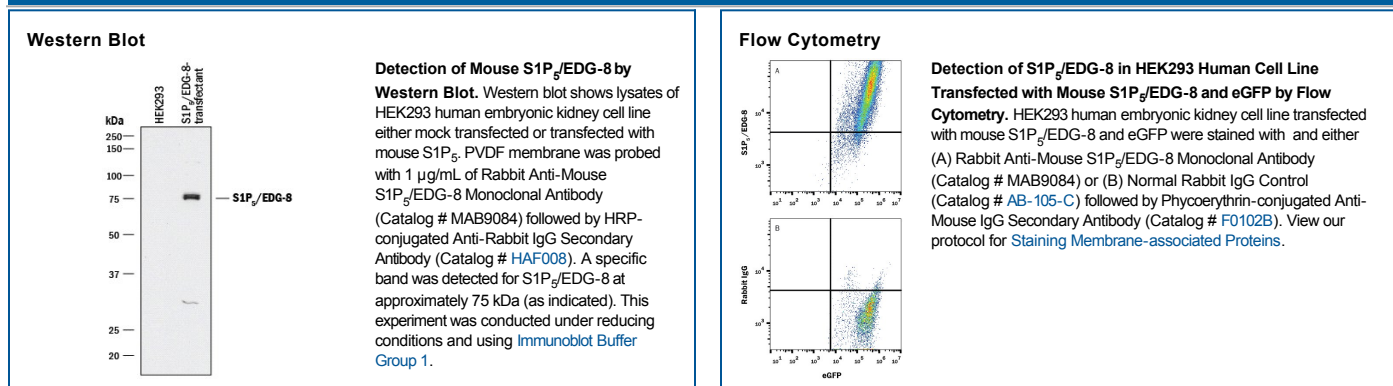
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Mouse   |
| <b>Specificity</b>        | Detects mouse S1P <sub>5</sub> /EDG-8 in Western blots.   |
| <b>Source</b>             | Recombinant Monoclonal Rabbit IgG Clone # 1196A   |
| <b>Purification</b>       | Protein A or G purified from cell culture supernatant   |
| <b>Immunogen</b>          | Mouse S1P <sub>5</sub> /EDG-8 peptide corresponding to the N-terminal extracellular sequence<br>Accession # Q91X56  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied 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    |
|-----------------------|-------------------------------|-----------|
| <b>Western Blot</b>   | 1 µg/mL                       | See Below |
| <b>Flow Cytometry</b> | 0.25 µg/10 <sup>6</sup> cells | See Below |

## DATA



## PREPARATION AND STORAGE

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

## BACKGROUND

S1P<sub>5</sub> (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 S1P<sub>1</sub>-S1P<sub>4</sub> (or EDG-1, EDG-5, EDG-3 and EDG-6, respectively), S1P<sub>5</sub> is known to bind S1P, a lipid synthesized by platelets, neutrophils, smooth muscle cells, mast cells and select fibroblasts. Mouse S1P<sub>5</sub> is a 400 amino acid (aa) 7-transmembrane glycoprotein that is expressed on brain endothelium, renal mesangial cells, Ly6C<sup>+</sup> (in human CD14<sup>+</sup>CD116<sup>+</sup>) monocytes, pre- and mature oligodendrocytes, and CD27<sup>+</sup>CD116<sup>+</sup> (mature) NK cells. S1P<sub>5</sub> appears to play a role in cell trafficking. On monocytes and NK cells, S1P<sub>5</sub> promotes cell migration out of the bone marrow, a phenomenon that may not be related to an S1P concentration gradient. S1P<sub>5</sub> also helps maintain the integrity of the blood-brain-barrier. On oligodendrocytes and precursors, S1P<sub>5</sub> appears to regulate cell survival and pseudopod extension. The extracellular segment of mouse S1P<sub>5</sub> shares 96% and 94% aa sequence identity with rat and human S1P<sub>5</sub> extracellular domains, respectively.