

DESCRIPTION

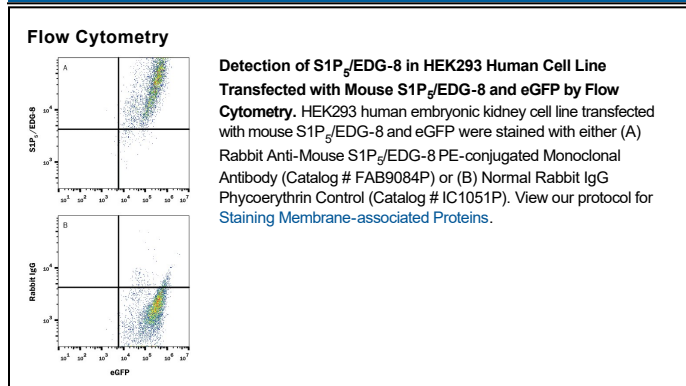
Species Reactivity	Mouse
Specificity	Detects mouse S1P ₅ /EDG-8 in Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1196A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Mouse S1P ₅ /EDG-8 peptide corresponding to the N-terminal extracellular sequence Accession # Q91X56
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

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.