

DESCRIPTION

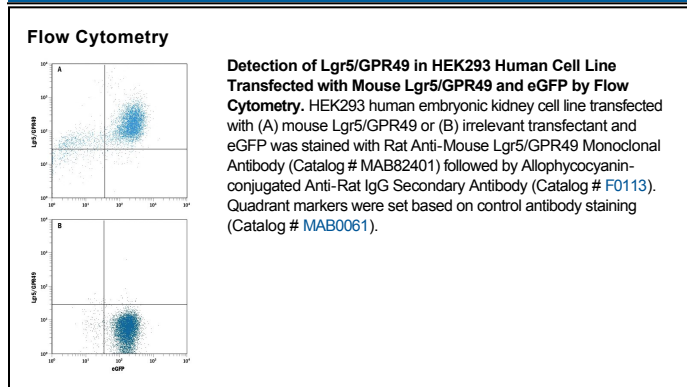
Species Reactivity	Mouse
Specificity	Detects mouse Lgr5/GPR49 in direct ELISAs. Stains mouse Lgr5 transfected cells but not irrelevant transfectants in Flow Cytometry.
Source	Monoclonal Rat IgG _{2B} Clone # 889901
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse Lgr5/GPR49 N-terminal peptide Ala21-Cys34 Accession # Q9Z1P4
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 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
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

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

Leucine-rich repeat G-protein-coupled Receptor 5 (Lgr5), also known as GPR49, is a 907 amino acid (aa), approximately 97 kDa (calculated), seven-transmembrane glycoprotein receptor in the Lgr family of cell surface receptors. The subfamily of Lgrs comprising Lgr4, Lgr5, and Lgr6 are G-protein-independent mediators of the potentiating effect of R-Spondins on Wnt signaling. Lgr5 binds and forms complexes with R-Spondins, Frizzled Wnt receptors and LRP Wnt co-receptors. The region of the mouse Lgr5 long extracellular domain used as an immunogen shares 90% and 95% amino acid sequence identity with human and rat Lgr5, respectively. Lgr5 is found on embryonic and adult epithelial stem cells. Lgr5+ stem cells can produce all epithelial cell types of the intestinal crypts. It is upregulated in stem cells that give rise to cancers such as intestinal, hepatocellular, pancreatic and ovarian carcinomas.