

DESCRIPTION

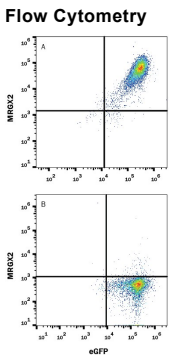
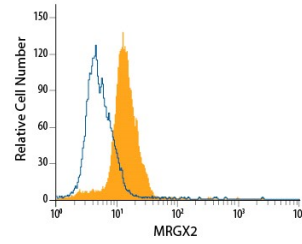
Species Reactivity	Human
Specificity	Detects human MRGX2. Stains human MRGX2 transfectants but not irrelevant transfectants.
Source	Monoclonal Mouse IgG _{2A} Clone # 477533
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human MRGX2 Met1-Val330 Accession # Q96LB1
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
Flow Cytometry	0.25 µL/10 ⁶ cells	See Below
Intracellular Staining by Flow Cytometry	0.25 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

<p>Flow Cytometry</p>  <p>Detection of MRGX2 in HEK293 Human Cell Line Transfected with Human MRGX2 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with human MRGX2 and eGFP was stained with Mouse Anti-Human MRGX2 Monoclonal Antibody (Catalog # MAB4727) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on control antibody staining (Catalog # MAB003). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of MRGX2 in HT-29 Human Cell Line by Flow Cytometry. HT-29 human colon adenocarcinoma cell line was stained with Mouse Anti-Human MRGX2 Monoclonal Antibody (Catalog # MAB4727, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.</p>
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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

MRGX2 (MAS-related GPR, member X2) is a 330 amino acid (aa) G-protein coupled 7-transmembrane protein that is selectively expressed in small-diameter sensory neurons of dorsal root ganglia. Human MRGX shares 41-52% aa identity with three other primate MRGX proteins, but has no ortholog in rodents. Binding of ligands such as cortistatin, proadrenomedullin peptides (PAMP-12 and -20) and basic peptides (substance P, neuropeptide Y) to MRGX2 can activate Gq or Gi regulated pathways. MRGX2 is thought to influence nociception and promote adrenal gland catecholamine secretion and IgE-independent mast cell degranulation.