

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GPR111 in direct ELISAs. Stains human GPR111 HEK293-transfected cells and does not stain irrelevant non-GPR111 transfectants by Flow Cytometry.
Source	Monoclonal Mouse IgG _{2B} Clone # 594522
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese Hamster Ovary cell line, CHO-derived human GPR111 Cys19-Lys375 Accession # Q8IZF7
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.

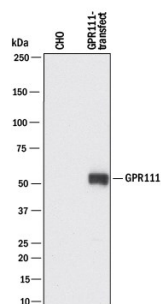
APPLICATIONS

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	2 µg/mL	See Below
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.	

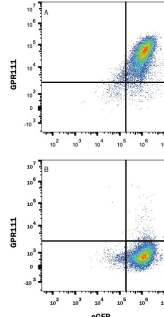
DATA

Western Blot



Detection of Human GPR111 by Western Blot. Western blot shows lysates of CHO Chinese hamster ovary cell line mock transfected or transfected with human GPR111. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human GPR111 Monoclonal Antibody (Catalog # MAB64941) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for GPR111 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Flow Cytometry



Detection of GPR111 in HEK293 Human Cell Line Transfected with Human GPR111 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with (A) GPR111 or (B) irrelevant protein, and eGFP were stained with Mouse Anti-Human GPR111 Monoclonal Antibody (Catalog # MAB64941) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based Mouse IgG2B Isotype Control Antibody staining (Catalog # MAB0041, data not shown). View our protocol for [Staining Membrane-associated Proteins](#).

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

GPR111 (G-protein coupled receptor 111; also PRG20) is a 71 kDa (predicted), seven transmembrane (TM) member of the GPR-2 family, LN-7TM subfamily of molecules. It is reportedly expressed in lung, mammary gland and diencephalon. Human GPR111 is 642 amino acids (aa) in length. It contains an extended N-terminal extracellular region with a mucin like stalk (aa 1-383), followed by a series of seven TM domains and a short C-terminal cytoplasmic tail. The N-terminus possesses a GPS (GPCR proteolytic site) (aa 324-368) that likely generates a soluble cleavage product. GPR111 is considered an adhesion-type GPCR, and as such, is expected to form dimers, if not oligomers. There is one potential splice variant for GPR111. It shows a 92 aa substitution for aa 1-24 coupled to a 19 aa substitution for aa 622-642. Over aa 19-375, human GPR111 shares 68% aa identity with mouse GPR111.