

Human GPR64 Antibody

Monoclonal Mouse IgG₁ Clone # 864238 Catalog Number: MAB79771

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human GPR64 in direct ELISAs.		
Source	Monoclonal Mouse IgG ₁ Clone # 864238		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human GPR64 Leu38-Asn64, Glu68-Thr553 Accession # NP_001073328		
Formulation	rmulation 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.		

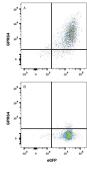
APPLICATIONS

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 μg/10 ⁶ cells	See Below	
Immunohistochemistry	5-25 μg/mL	See Below	
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.		

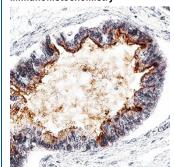
DATA

Flow Cytometry



Detection of GPR64 in HEK293 Human Cell Line Transfected with Human GPR64 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with (A) human GPR64 or (B) irrelevant transfectants and eGFP was stained with Mouse Anti-Human GPR64 Monoclonal Antibody (Catalog # MAB79771) followed by APC-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on control antibody staining (Catalog # MAB002). View our protocol for Staining Membrane-associated Proteins.

Immunohistochemistry



GPR64 in Human Epididymis. GPR64 was detected in immersion fixed paraffinembedded sections of human epididymis using Mouse Anti-Human GPR64 Monoclonal Antibody (Catalog # MAB79771) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cell surface in principal cells. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

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

- 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

GPR64 (G-Protein coupled Receptor 64; also HE6) is a 110 kDa (predicted) member of the B class of GCPRs. Within this class GPR64 belongs to a Large N-termini family-B 7-transmembrane (LNB-7TM) subclass of receptors (also known as adhesion-GCPRs). GPR64 has restricted expression, being found in stereocilia cell membranes of epididymal caput epithelial cells and, to a limited extent, on osteoblasts. The function of GPR64 is somewhat unclear, but in the epididymis, it may be involved in fluid transport. Mature human GPR64 is a 980 amino acid (aa) 7-TM glycoprotein (SwissProt Q8IZP9). It contains an extended extracellular N-terminus (aa 38-627), seven consecutive TM segments (aa 628-878) and a C-terminal cytoplasmic tail (aa 879-1010). The extended extracellular region possesses a juxtamembrane GPS domain (aa 567-618) that serves as a proteolytic cleavage site. Enzymatic activity here generates a 180 kDa soluble form that stays associated with a 40 kDa membrane-embedded fragment. Notably, isolation of the membrane fragment gives rise to oligomers that run at > 250 kDa in SDS-PAGE. There are multiple splice variants. The one used for immunization to generate this antibody contains a deletion of aa 88-101 (RefSeq NP_001073328). Four other splice forms show single block deletions of aa 65-67, 51-66, 52-75, and 906-956, respectively. Three others possesses aa substitutions; a 20 aa block for aa 52-101, and a common 12 aa block that can substitute for either aa 68-101 or aa 52-101. Over aa 38-64 and 68-553 of RefSeq NP_001073328, human and mouse GPR64 share 69% aa sequence identity.

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