

DESCRIPTION

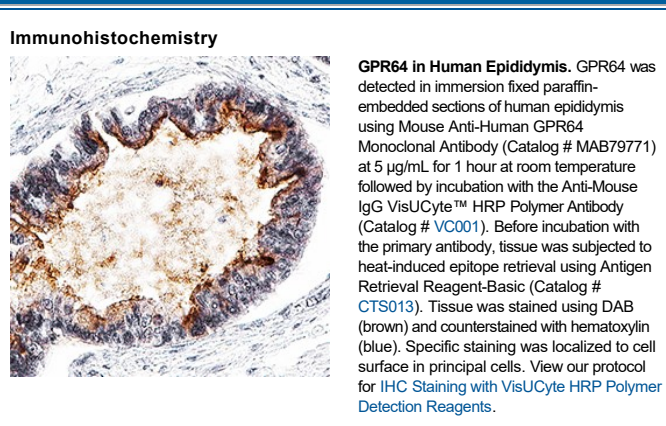
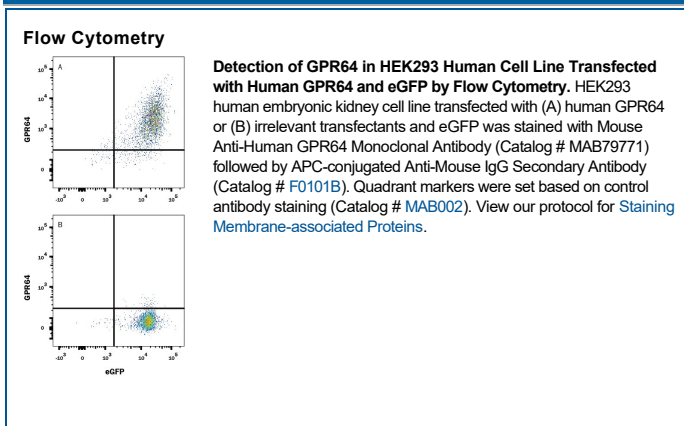
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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human GPR64 in direct ELISAs. |
| Source | Monoclonal Mouse IgG ₁ Clone # 864238 |
| Purification | Protein A or G purified from hybridoma culture supernatant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



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

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 possess 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.