

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat GPR64 in direct ELISA and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human GPR64 Leu38-Asn64, Glu68-Thr553 Accession # NP_001073328
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

PRODUCT SPECIFIC NOTICES

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