

#### DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat GPR64 in direct ELISA and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human GPR64 Leu38-Asn64, Glu68-Thr553 Accession # NP_001073328
<b>Conjugate</b>	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Flow Cytometry</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	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 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.

#### PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.