Nanodisc Human FXYD5 Protein



HDFP593

Product Information

Product SKU: HDFP593 Expression Host: HEK293 Size: 10μg

Target: FXYD5 Tag: C-Flag Tag

Additional Information

Conjugate: Unconjugated Uniprot ID: Q96DB9

Molecular Weight: The human full length FXYD5 protein has a MW of 19.5kDa

Protein Information

Background: This gene encodes a member of a family of small membrane proteins that share a

35-amino acid signature sequence domain, beginning with the sequence PFXYD and

containing 7 invariant and 6 highly conserved amino acids. The approved human

gene nomenclature for the family is FXYD-domain containing ion transport regulator.

Mouse FXYD5 has been termed RIC (Related to Ion Channel). FXYD2, also known as

the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme.

FXYD1 (phospholemman), FXYD2 (gamma), FXYD3 (MAT-8), FXYD4 (CHIF), and FXYD5

(RIC) have been shown to induce channel activity in experimental expression systems.

Transmembrane topology has been established for two family members (FXYD1 and

FXYD2), with the N-terminus extracellular and the C-terminus on the cytoplasmic side

of the membrane. This gene product, FXYD5, is a glycoprotein that functions in the

up-regulation of chemokine production, and it is involved in the reduction of cell

adhesion via its ability to down-regulate E-cadherin. It also promotes metastasis, and

has been linked to a variety of cancers. Alternative splicing results in multiple

transcript variants. [RefSeq curation by Kathleen J. Sweadner,

Ph.D.,sweadner@helix.mgh.harvard.edu., Sep 2009]

Synonyms: DYSAD, HSPC113, IWU1, KCT1, OIT2, PRO6241, RIC

Protein Description: Human FXYD5 full length protein-synthetic nanodisc

Formulation: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH

8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization. Please

see Certificate of Analysis for specific instructions. Do not use solvents with a pH

below 6.5 or those containing high concentrations of divalent metal ions (greater

than 5 mM) in subsequent experiments.

Protein Pathways: -

Protein Families: Ion Channels: Other.

Usage: Research use only

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not

intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing

and thawing). Lyophilized proteins are shipped at ambient temperature.