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Product Information

MemDX™ Membrane Protein Human CLDN16 (Claudin 16) Full Length

Cat. No.: **MPC0490K**
This product is for research use only and is not intended for diagnostic use.

This product is a 33.8 kDa Human CLDN16 membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species
Human

Target Protein
CLDN16

Protein Length
Full length

Protein Class
Transporter; Ion channel

Molecular Weight
33.8 kDa

TMD
4

Sequence
MTSRTPLLVTACLYYSYCNSRHLQQGVRKSKRPVFSHCQVPETQKTDTRH
LSGARAGVCPCCHPDGLLATMRDLLQYIACFFAFFSAGFLIVATWTDCWM
VNADDSLEVSTKCRGLWWECVTNAFDGIRTCDEYDSILAEHPLKLVVTRA
LMITADILAGFGFLTLLLGLDCVKFLPDEPYIKVRICFVAGATLLIAGTP
GIIGSVWYAVDVYVERSTLVLHNIFLGIQYKFGWSCWLGMAGSLGCFLAG
AVLTCCLYLFKDVGPERNYPYSLRKAYSAAGVSMAKSYSAPRTETAKMYA
VDTRV

Product Description

Expression Systems
HEK293

Tag
Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

CLDN16

Full Name

Claudin 16

Introduction

Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. It is found primarily in the kidneys, specifically in the thick ascending limb of Henle, where it acts as either an intercellular pore or ion concentration sensor to regulate the paracellular resorption of magnesium ions. Defects in this gene are a cause of primary hypomagnesemia, which is characterized by massive renal magnesium wasting with hypomagnesemia and hypercalciuria, resulting in nephrocalcinosis and renal failure. This gene and the CLDN1 gene are clustered on chromosome 3q28.

Alternative Names

HOMG3; PCLN1; claudin-16; hypomagnesemia 3, with hypercalciuria and nephrocalcinosis; paracellin-1; CLDN16; Claudin 16

Gene ID

10686

UniProt ID

Q9Y5I7