

Recombinant Human ANO9 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50035

Size: 10ug, 100ug

Protein Name: Anoctamin-9 (Transmembrane protein 16J) (Tumor protein p53-inducible protein 5) (p53-induced gene 5 protein)

Synonym: ANO9, PIG5, TMEM16J, TP53I5

UniProt ID: A1A5B4

UniProt Link: www.uniprot.org/uniprotkb/A1A5B4/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 782 AA

Molecular Weight: 90 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MQGEESLRILVEPEGDSFPLMEISTCETEASEQWDYVLVAQRHTQRDPRQARQQQFLEELRRKGFH
IKVIRDQKQVFFGIRADNSVFGLYRTLLEPEGPAPHAELAAPTTPVTTSLRIRIVNFVVMNNKTSAGE
TFEDLMKDGVFEARFPLHKGEGRLKKTWARWRHMFREQPVDEIRNYFGEKVALYFVWLGWYTYML
VPAALTGLLVFLSGFSLFEASQISKEICEAHDILMCPLGDHSRRYQRLSETCTFAKLTHLFDNDGTVVF
AIFMALWATVFLEIWKQRQARVVLHWDLYVWDEEQEEMALQLINCPDYKLRPYQHSYLRSTVILVLT
LLMICLMIGMAHVLVYRVLASALFSSSAVPFLEEQVTTAVVVTGALVHYVTIIIMTKINRCVALKLCDF
EMPRTFSERESRFTIRFFTLQFFTHFSSLIYAFILGRINGHPGKSTRLAGLWKLEECHASGCMMDLFV
QMAIIMGLKQTLNSNCVEYLPVWVTHKCRSLRASESGHLPRDPELRDWRNRYLLNPVNTFSLFDEFM
EMMIQYGFTTIFVAAFPLAPLLALFSNLVEIRLDAIKMVWLQRRLVPRKAKDIGTWLQVLETIGVLAVIA
NGMVIAFTSEFIPRVVYKYRYSPLKEGNSTVDCLKGYVNHSLSVFHTKDFQDPDGIEGSENVTLCR
YRDYRNPPDYNFSEQFWFLAIRLAFVILFEHVALCIKIAAWFVPDIPQSVKNKVLEVKYQRLREKM
WHGRQRLGGVGAGSRPPMPAHPTPASIFSARSTDV

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Anoctamin-9 (Transmembrane protein 16J) (Tumor protein p53-inducible protein 5) (p53-induced gene 5 protein) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: PKA-activated nonselective cation channel (PubMed:29604966). Discriminates poorly among cations but is more permeable to Ca(2+) ions than to monovalent cations (By similarity). Acts as a calcium-activated calcium permeable channel which may operate as an endoplasmic reticulum (ER) Ca(2+)-leak channel, reducing the loading of the ER Ca(2+) store (PubMed:36520003). Regulates intracellular Ca2+ signals, ion channel activity, and cytokine release in the renal tissue (PubMed:36520003). Plays an important role in olfaction, amplifying cAMP-evoked cyclic nucleotide-gated (CNG) channel currents in the olfactory sensory neurons (By similarity). Has calcium-dependent phospholipid scramblase activity; scrambles phosphatidylserine, phosphatidylcholine and galactosylceramide (By similarity). Does not exhibit calcium-activated chloride channel (CaCC) activity (PubMed:22178883). Can inhibit the activity of ANO1 (PubMed:20056604, PubMed:22946059).

Subcellular Localization: Cell membrane ; Multi-pass membrane protein . Endoplasmic reticulum .
Note=Shows predominantly an intracellular localization with a weak expression in the cell membrane.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.