Recombinant Human AQP1, His-tagged, GST-tagged

Cat. No. AQP1-3592H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Aquaporin 1, Colton Blood Group (AQP1)
Species	Human
Source	E.coli
ProteinLength	186
Description	Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein (MIP or AQP0). This gene encodes an aquaporin which functions as a molecular water channel protein. It is a homotetramer with 6 bilayer spanning domains and N-glycosylation sites. The protein physically resembles channel proteins and is abundant in erythrocytes and renal tubes. The gene encoding this aquaporin is a possible candidate for disorders involving imbalance in ocular fluid movement. Several transcript variants encoding different isoforms have been found for this gene.
Form	Supplied as lyophilized form in PBS,pH7.4, containing 5% sucrose, 0.01% sarcosyl.
Molecular Mass	39.9kDa
Endotoxin	<1.0eu per 1ug (determined by the lal</1.0eu
Purity	>95%
Applications	SDS-PAGE, Western Blot (WB), ELISA (EIA), Immunoprecipitation (IP)

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Notes	Small volumes of AQP1 recombinant protein may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months.Stability Test: The thermal stability is described by the loss rate of the targetprotein. The loss rate was determined by accelerated thermal degradation test,that is, incubate the protein at 37 degree C for 48h, and no obvious degradation andprecipitation were observed. (Referring from China Biological Products Standard,which was calculated by the Arrhenius equation.) The loss of this protein is lessthan 5% within the expiration date under appropriate storage condition.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.
Warning	This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GENE INFORMATION

Gene Name	AQP1 aquaporin 1 (Colton blood group) [Homo sapiens]
Official Symbol	AQP1
Synonyms	AQP1; aquaporin 1 (Colton blood group); aquaporin 1 (channel forming integral protein, 28kDa) , aquaporin 1 (channel forming integral protein, 28kDa, CO blood group) , CO, Colton blood group; aquaporin-1; CHIP28; aquaporin-CHIP; Colton blood group; urine water channel; channel-like integral membrane protein, 28-kDa; water channel protein for red blood cells and kidney proximal tubule; aquaporin 1 (channel-forming integral protein, 28kDa, CO blood group); CO; AQP-CHIP;

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	MGC26324;
Gene ID	358
mRNA Refseq	NM_001185060
Protein Refseq	NP_001171989
MIM	107776
UniProt ID	P29972
Chromosome Location	7p14
Pathway	Aquaporin-mediated transport, organism-specific biosystem; Bile secretion, organism-specific biosystem; Bile secretion, conserved biosystem; Passive Transport by Aquaporins, organism-specific biosystem; Proximal tubule bicarbonate reclamation, organism-sp
Function	ammonia transmembrane transporter activity; carbon dioxide transmembrane transporter activity; glycerol transmembrane transporter activity; intracellular cGMP activated cation channel activity; nitric oxide transmembrane transporter activity; potassium channel activity; potassium ion transmembrane transporter activity; protein binding; transmembrane transporter activity; water channel activity; water channel activity; water channel activity; water transmembrane transporter activity;

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