

Recombinant Human AQP2, His-tagged, GST-tagged

Cat. No. AQP2-3593H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Aquaporin 2, Collecting Duct (AQP2)
Species	Human
Source	E.coli
ProteinLength	271
Description	This gene encodes a water channel protein located in the kidney collecting tubule. It belongs to the MIP/aquaporin family, some members of which are clustered together on chromosome 12q13. Mutations in this gene have been linked to autosomal dominant and recessive forms of nephrogenic diabetes insipidus.
Form	Supplied as lyophilized form in PBS,pH7.4, containing 5% sucrose, 0.01% sarcosyl.
Molecular Mass	42.6kDa
Endotoxin	<1.0eu per 1ug (determined by the lal</1.0eu
Purity	>95%
Applications	SDS-PAGE, Western Blot (WB), ELISA (EIA), Immunoprecipitation (IP)
Notes	Small volumes of AQP2 recombinant protein may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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 target protein. 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 and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

Reconstitution

Reconstitute in sterile PBS, pH 7.2-pH 7.4.

Warning

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GENE INFORMATION

Gene Name

AQP2 aquaporin 2 (collecting duct) [Homo sapiens]

Official Symbol

AQP2

Synonyms

AQP2; aquaporin 2 (collecting duct); aquaporin-2; AQP-2; aquaporin-CD; ADH water channel; water-channel aquaporin 2; collecting duct water channel protein; water channel protein for renal collecting duct; AQP-CD; WCH-CD; MGC34501;

Gene ID

359

mRNA Refseq

NM_000486

Protein Refseq

NP_000477

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

MIM	107777
UniProt ID	P41181
Chromosome Location	12q12-q13
Pathway	Aquaporin-mediated transport, organism-specific biosystem; Passive Transport by Aquaporins, organism-specific biosystem; Regulation of Water Balance by Renal Aquaporins, organism-specific biosystem; Transmembrane transport of small molecules, organism-spe
Function	PDZ domain binding; actin binding; glycerol transmembrane transporter activity; transporter activity; water channel activity; water transmembrane transporter activity;

 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA