

## Recombinant Human AQP2, His-tagged, GST-tagged

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

### SPECIFICATION

<b>Product Overview</b>	Aquaporin 2, Collecting Duct (AQP2)
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	271
<b>Description</b>	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.
<b>Form</b>	Supplied as lyophilized form in PBS,pH7.4, containing 5% sucrose, 0.01% sarcosyl.
<b>Molecular Mass</b>	42.6kDa
<b>Endotoxin</b>	<1.0eu per 1ug (determined by the lal</1.0eu
<b>Purity</b>	>95%
<b>Applications</b>	SDS-PAGE, Western Blot (WB), ELISA (EIA), Immunoprecipitation (IP)
<b>Notes</b>	Small volumes of AQP2 recombinant protein may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly

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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, pH7.2-pH7.4.

**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](#)

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<b>MIM</b>	107777
<b>UniProt ID</b>	P41181
<b>Chromosome Location</b>	12q12-q13
<b>Pathway</b>	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
<b>Function</b>	PDZ domain binding; actin binding; glycerol transmembrane transporter activity; transporter activity; water channel activity; water transmembrane transporter activity;

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