

## AQP2 Protein, Rat, Recombinant (His)

### General Information

Synonyms:	AQP-2; Aquaporin-CD (AQP-CD); Aquaporin-2; ADH water channel; WCH-CD; Water channel protein for renal collecting duct; Aqp2; Collecting duct water channel protein
Protein Construction:	1-271 aa
Species:	Rat
Expression Host:	E. coli
Accession:	P34080
Molecular Weight:	30.4 kDa (predicted)
AA Sequence:	MWELRSIAFSRAVLAEFLATLLFVFFGLGSALQWASSPPSVLQIAVAFGLGIGILVQALGHVSGAHINPAVTVA CLVGCHVSFLRAAFYVAAQLLGAVAGAAILHEITPVEIRGDLAVNALHNNATAGQAVTVELFLTMQLVLCIFAS TDERRGDNLGSPALSIGFSVTLGHLLGIYFTGCSMNPARS LAPAVVTGKFDDHWVFWIGPLVGAIIIGSLLYNYL LFPSAKSLQERLAVLKGLEPDTDWEEREVRRRQSVELHSPQSLPRGSKA

### QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

### Preparation and Storage

#### Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

#### Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

#### Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

## A DRUG SCREENING EXPERT

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Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient. Plays an essential role in renal water homeostasis.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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