

# Datasheet for ABIN7552315 **AQP11 Protein (AA 1-271) (His tag)**



#### Overview

| Quantity:                     | 1 mg   |
|-------------------------------|--|
| Target:                       | AQP11  |
| Protein Characteristics:      | AA 1-271                                     |
| Origin:                       | Human  |
| Source:                       | HEK-293 Cells                                |
| Protein Type:                 | Recombinant                                  |
| Purification tag / Conjugate: | This AQP11 protein is labelled with His tag. |

#### **Product Details**

| Purpose:         | Custom-made recombinant AQP11 Protein expressed in mammalian cells.                             |
|------------------|---|
| Sequence:        | MSPLLGLRSE LQDTCTSLGL MLSVVLLMGL ARVVARQQLH RPVAHAFVLE FLATFQLCCC                               |
|                  | THELQLLSEQ HPAHPTWTLT LVYFFSLVHG LTLVGTSSNP CGVMMQMMLG GMSPETGAVR                               |
|                  | LLAQLVSALC SRYCTSALWS LGLTQYHVSE RSFACKNPIR VDLLKAVITE AVCSFLFHSA                               |
|                  | LLHFQEVRTK LRIHLLAALI TFLVYAGGSL TGAVFNPALA LSLHFMCFDE AFPQFFIVYW                               |
|                  | LAPSLGILLM ILMFSFFLPW LHNNHTINKK E Sequence without tag. The proposed                           |
|                  | Purification-Tag is based on experiences with the expression system, a different complexity     |
|                  | of the protein could make another tag necessary. In case you have a special request, please     |
|                  | contact us.   |
| Specificity:     | If you are looking for a specific domain and are interested in a partial protein or a different |
|                  | isoform, please contact us regarding an individual offer.                                       |
| Characteristics: | Key Benefits:   |

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

#### **Target Details**

| Target:   | AQP11   |
|-----------|---------|
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#### Alternative Name: AQP11 (AQP11 Products)

Background:

Aquaporin-11 (AQP-11),FUNCTION: Channel protein that facilitates the transport of water, glycerol and hydrogen peroxide across membrane of cell or organelles guaranteeing intracellular homeostasis in several organes like liver, kidney and brain (PubMed:24845055, PubMed:24918044, PubMed:31546170). In situation of stress, participates in endoplasmic reticulum (ER) homeostasis by regulating redox homeostasis through the transport of hydrogen peroxide across the endoplasmic reticulum membrane thereby regulating the oxidative stress through the NADPH oxidase 2 pathway (PubMed:31546170). Plays a role by maintaining an environment suitable for translation or protein foldings in the ER lumen namely by participating in the PKD1 glycosylation processing resulting in regulation of PKD1 membrane trafficking thereby preventing the accumulation of unfolding protein in ER (By similarity). Plays a role in the proximal tubule function by regulating its endosomal acidification (By similarity).

{ECO:0000250|UniProtKB:Q8BHH1, ECO:0000269|PubMed:24845055, ECO:0000269|PubMed:24918044, ECO:0000269|PubMed:31546170}.

### **Target Details**

| Molecular Weight: | 30.2 kDa |
|-------------------|----------|
| UniProt:          | Q8NBQ7   |

## **Application Details**

| Application Notes: | We expect the protein to work for functional studies. As the protein has not been tested for |
|--------------------|--|
|                    | functional studies yet we cannot offer a guarantee though.                                   |
| Restrictions:      | For Research Use only  |

## Handling

| Format:          | Liquid   |  |
|------------------|--|--|
| Buffer:          | The buffer composition is at the discretion of the manufacturer. |  |
| Handling Advice: | Avoid repeated freeze-thaw cycles.                               |  |
| Storage:         | -80 °C   |  |
| Storage Comment: | Store at -80°C.  |  |
| Expiry Date:     | 12 months  |  |