

## Recombinant Rat Aqp4 protein, His-tagged

Cat. No. Aqp4-3532R    Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Rat Aqp4(Asp179~Asp314) fused with His tag at N-terminal was expressed in E. coli.
<b>Species</b>	Rat
<b>Source</b>	E.coli
<b>ProteinLength</b>	Asp179~Asp314
<b>Description</b>	<p>This gene encodes a member of the aquaporin family of intrinsic membrane proteins that function as water-selective channels in the plasma membranes of many cells. This protein is the predominant aquaporin found in brain and has an important role in brain water homeostasis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. A recent study provided evidence for translational readthrough in this gene and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon.</p>
<b>Form</b>	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300
<b>Molecular Mass</b>	47.4kDa
<b>Endotoxin</b>	<1.0EU per 1ug (determined by the LAL method)
<b>Purity</b>	> 95%

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

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

<b>Applications</b>	SDS-PAGE; WB; ELISA; IP
<b>Stability</b>	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
<b>Reconstitution</b>	Reconstitute in PBS or others.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	<a href="#">Aqp4 aquaporin 4 [ Rattus norvegicus ]</a>
<b>Official Symbol</b>	<a href="#">Aqp4</a>
<b>Synonyms</b>	AQP4; aquaporin 4; aquaporin-4; WCH4; aquaporin 4.M23; mercurial-insensitive water channel; Miwc; AQP-4; MIWC2; AQP4.M23;
<b>Gene ID</b>	<a href="#">25293</a>
<b>mRNA Refseq</b>	<a href="#">NM_001142366</a>
<b>Protein Refseq</b>	<a href="#">NP_001135838</a>
<b>Chromosome Location</b>	18p13
<b>Pathway</b>	Aquaporin-mediated transport, organism-specific biosystem; Bile secretion, organism-

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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



specific biosystem; Bile secretion, conserved biosystem; Regulation of Water Balance by Renal Aquaporins, organism-specific biosystem; Transmembrane transport of small molecules, organism-specific biosystem; Vasopressin-regulated water reabsorption, organism-specific biosystem; Vasopressin-regulated water reabsorption, conserved biosystem;

**Function**

porin activity; transporter activity; water channel activity; water channel activity;

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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