Recombinant Rat Aqp4 protein, His-tagged

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

SPECIFICATION

Product Overview	Recombinant Rat Aqp4(Asp179~Asp314) fused with His tag at N-terminal was expressed in E. coli.
Species	Rat
Source	E.coli
ProteinLength	Asp179~Asp314
Description	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.
Form	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300
Molecular Mass	47.4kDa
Endotoxin	<1.0EU per 1ug (determined by the LAL method)
Purity	> 95%

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Applications	SDS-PAGE; WB; ELISA; IP
Stability	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.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Reconstitution	Reconstitute in PBS or others.

GENE INFORMATION

Gene Name	Aqp4 aquaporin 4 [Rattus norvegicus]
Official Symbol	Aqp4
Synonyms	AQP4; aquaporin 4; aquaporin-4; WCH4; aquaporin 4.M23; mercurial-insensitive water channel; Miwc; AQP-4; MIWC2; AQP4.M23;
Gene ID	25293
mRNA Refseq	NM_001142366
Protein Refseq	NP_001135838
Chromosome Location	18p13
Pathway	Aquaporin-mediated transport, organism-specific biosystem; Bile secretion, organism-

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	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;

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