

Aquaporin-4 (AQP4) Recombinant Protein | AQP4 recombinant protein

Recombinant Human Aquaporin-4 (AQP4), partial

CATALOG # AAA18480	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
------------------------------	---

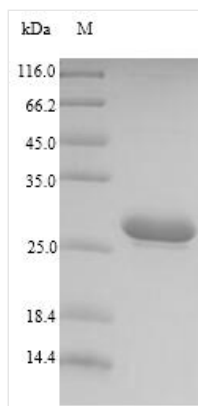
PRODUCT SYNONYMS

Aquaporin-4 (AQP4); Recombinant Human Aquaporin-4 (AQP4); partial; Mercurial-insensitive water channel; MIWC WCH4; AQP4 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	253-323. Partial
Sequence	CPDVEFKRRF KEAFSKAAQQ TKGSYMEVED NRSQVETDDL ILKPGVVHVI DVDRGEEKKG KDQSGEVLSS V
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for AQP4 recombinant protein	Forms a water-specific channel. Osmoreceptor which regulates body water balance and mediates water flow within the central nervous system.
Product Categories/Family for AQP4 recombinant protein	Transport

References	cDNA cloning, gene organization, and chromosomal localization of a human mercurial insensitive water channel. Evidence for distinct transcriptional units. Yang B., Ma T., Verkman A.S.J. Biol. Chem. 270:22907-22913(1995) A water channel closely related to rat brain aquaporin 4 is expressed in acid- and pepsinogen-secretory cells of human stomach. Misaka T., Abe K., Iwabuchi K., Kusakabe Y., Ichinose M., Miki K., Emori Y., Arai S. FEBS Lett. 381:208-212(1996) The human AQP4 gene definition of the locus encoding two water channel polypeptides in brain. Lu M., Lee M.D., Smith B.L., Jung J.S., Agre P., Verdijk M.A.J., Merckx G., Rijss J.P.L., Deen P.M.T. Proc. Natl. Acad. Sci. U.S.A. 93:10908-10912(1996) DNA sequence and analysis of human chromosome 18. Nusbaum C., Zody M.C., Borowsky M.L., Kamal M., Kodira C.D., Taylor T.D., Whittaker C.A., Chang J.L., Cuomo C.A., Dewar K., FitzGerald M.G., Yang X., Abouelleil A., Allen N.R., Anderson S., Bloom T., Bugalter B., Butler J., Cook A., DeCaprio D., Engels R., Garber M., Gnirke A., Hafez N., Hall J.L., Norman C.H., Itoh T., Jaffe D.B., Kuroki Y., Lehoczy J., Lui A., Macdonald P., Mauceli E., Mikkelsen T.S., Naylor J.W., Nicol R., Nguyen C., Noguchi H., O'Leary S.B., Piquani B., Smith C.L., Talamas J.A., Topham K., Totoki Y., Toyoda A., Wain H.M., Young S.K., Zeng Q., Zimmer A.R., Fujiyama A., Hattori M., Birren B.W., Sakaki Y., Lander E.S. Nature 437:551-555(2005) Megalencephalic leukoencephalopathy with subcortical cysts protein 1 functionally cooperates with the TRPV4 cation channel to activate the response of astrocytes to osmotic stress dysregulation by pathological mutations. Lanciotti A., Brignone M.S., Molinari P., Visentin S., De Nuccio C., Macchia G., Aiello C., Bertini E., Aloisi F., Petrucci T.C., Ambrosini E. Hum. Mol. Genet. 21:2166-2180(2012) Crystal structure of human aquaporin 4 at 1.8 Å and its mechanism of conductance. Ho J.D., Yeh R., Sandstrom A., Chorny I., Harries W.E., Robbins R.A., Miercke L.J., Stroud R.M. Proc. Natl. Acad. Sci. U.S.A. 106:7437-7442(2009)
------------	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502181
NCBI GeneID	361
NCBI Accession #	NP_001641.1
NCBI GenBank Nucleotide #	NM_001650.5
UniProt Accession #	P55087; P78564
Molecular Weight	10 kDa
NCBI Official Full Name	aquaporin-4 isoform M1
NCBI Official Synonym Full Names	aquaporin 4
NCBI Official Symbol	AQP4
NCBI Official Synonym Symbols	MIWC; WCH4
NCBI Protein Information	aquaporin-4
UniProt Protein Name	Aquaporin-4
UniProt Gene Name	AQP4
UniProt Synonym Gene Names	AQP-4; MIWC
UniProt Entry Name	AQP4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.