

## Recombinant Human Aquaporin-4(AQP4),partial

Catalog Number: RPC20006

<b>Product Name</b>	Recombinant Human Aquaporin-4(AQP4),partial
<b>Catalog Number</b>	RPC20006
<b>Expression host</b>	<i>E.coli</i>
<b>Product Info</b>	N-terminal 6xHis-SUMO-tagged
<b>Storage Buffer</b>	Lyophilized from 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0. The volume before lyophilization is 1000µl/vial.
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Relevance</b>	Forms a water-specific channel (PubMed:7559426, PubMed:8601457, PubMed:19383790). Plays an important role in brain water homeostasis and in glymphatic solute transport. Required for a normal rate of water exchange across the blood brain interface. Required for normal levels of cerebrospinal fluid influx into the brain cortex and parenchyma along paravascular spaces that surround penetrating arteries, and for normal drainage of interstitial fluid along paravenous drainage pathways. Thereby, it is required for normal clearance of solutes from the brain interstitial fluid, including soluble beta-amyloid peptides derived from APP. Plays a redundant role in urinary water homeostasis and urinary concentrating ability (By similarity).
<b>AA sequence</b>	CPDVEFKRRFKEAFSKAAQQTGSGYMEVEDNRSQVETDDLILKPGVVHVID VDRGEEKKGDQSGEVLSSV
<b>References</b>	"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. Lander E.S. Nature 437:551-555(2005)



**Biomatik**

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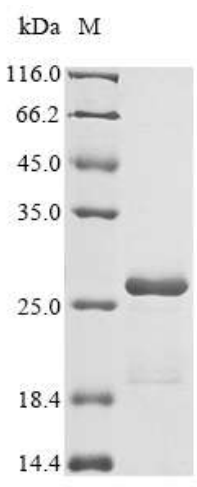
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## Certificate of Analysis

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<b>Catalog Number</b>	RPC20006	
<b>Expression host</b>	<i>E.coli</i>	
<b>Product Info</b>	N-terminal 6xHis-SUMO-tagged	
<b>Buffer</b>	Lyophilized from 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0. The volume before lyophilization is 1000µl/vial.	
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.	
<b>Batch Number</b>	DD04490a5g0	
<b>Nature</b>	Human AQP4-(AA 253-323)- <b>P55087</b> -Partial Protein	
<b>Purification</b>	Affinity purified using IMAC	
<b>Recommended Storage</b>	Short term	2 to 8 °C, one week after reconstitution
	Long term	-20 to -80 °C, twelve months from the date of receipt
<b>Form</b>	Lyophilized powder	
<b>Date of detection</b>	2020.04.10	
<b>Test Items</b>	<b>Specifications</b>	<b>Results</b>
<b>Purity</b>	≥90%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.	
<b>Molecular Weight</b>	Predicted band size: 24.0 kDa	Observed band size: 26 kDa

<b>Electrophoretic parameters</b>	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
<b>Aseptic Processing</b>	Not done
<b>Endotoxin Level</b>	Untreated
<b>Activity</b>	Not tested
<b>Conclusion</b>	pass