Datasheet

Product Name	Recombinant Human Gap junction alpha-1 protein (GJA1),partial
Catalog Number	AAA18724
Expression host	*Baculovirus*
Product Info	N-terminal 10xHis-tagged
Storage Buffer	20 mM Tris-HCl, 0.5 M NaCl, pH 8.0, 10% glycerol
Storage	Store at -20℃, for extended storage, conserve at -20℃ or -80℃.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4℃ for up to one week.
Relevance	Gap junction protein that acts as a regulator of bladder capacity. A gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell. May play a critical role in the physiology of hearing by participating in the recycling of potassium to the cochlear endolymph. Negative regulator of bladder functional capacity: acts by enhancing intercellular electrical and chemical transmission, thus sensitizing bladder muscles to cholinergic neural stimuli and causing them to contract (By similarity). May play a role in cell growth inhibition through the regulation of NOV expression and localization. Plays an essential role in gap junction communication in the ventricles (By similarity).
AA sequence	FKGVKDRVKGKSDPYHATSGALSPAKDCGSQKYAYFNGCSSPTAPLSPMSPP GYKLVTGDRNNSSCRNYNKQASEQNWANYSAEQNRMGQAGSTISNSHAQPF DFPDDNQNSKKLAAGHELQPLAIVDQRPSSRASSRASSRPRPDDLEI
References	"The DNA sequence and analysis of human chromosome 6." Mungall A.J., Palmer S.A., Sims S.K., Edwards C.A., Ashurst J.L., Wilming L., Jones M.C., Horton R., Hunt S.E., Scott C.E., Gilbert J.G.R., Clamp M.E., Bethel G., Milne S., Ainscough R., Almeida J.P., Ambrose K.D., Andrews T.D. Beck S. Nature 425:805-811(2003)

Certificate of Analysis

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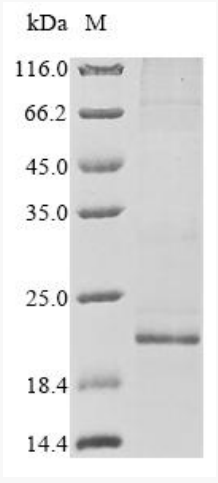
Product Info	N-terminal 10xHis-tagged		
Buffer	20 mM Tris-HCl, 0.5 M NaCl, pH 8.0, 10% glycerol		
Batch Number	04103		
Nature	Human GJA1-(AA 233-382)-**P17302**-Partial Protein		
Purification	Affinity purified using IMAC		
Recommended Storage	Short term	2 to 8 ℃, one week from the date of receipt	
	Long term	-20 to -80 ℃, six months from the date of receipt	
Form	Liquid		
Date of detection	2019.03.20		
Test Items	**Specifications**		**Results**
Appearance	Clear Solution		pass
Concentration	0.1-5 mg/ml, by the Bradford Method.		0.2 mg/ml
Purity	≥85%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.		85%
Molecular Weight	Predicted band size: 18.8 kDa		Observed band size: 21 kDa The reducing (R) protein migrates as 21 kDa in SDS-PAGE may be due to molecular structure of protein.

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