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Tel: (519) 489-7195, (800) 836-8089
Fax: (519) 231-0140, (877) 221-3515
Email: info@biomatik.com
http://www.biomatik.com

Recombinant Human 78 kDa glucose-regulated protein(HSPA5),partial

Catalog Number: RPC20182

Product Name	Recombinant Human 78 kDa glucose-regulated protein(HSPA5),partial
Catalog Number	RPC20182
Expression host	*E.coli*
Product Info	N-terminal 6xHis-tagged
Storage Buffer	10 mM Tris-HCl, 1 mM EDTA, pH 8.0, 50% 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	Endoplasmic reticulum chaperone that plays a key role in protein folding and quality control in the endoplasmic reticulum lumen (PubMed:2294010, PubMed:23769672, PubMed:23990668, PubMed:28332555). Involved in the correct folding of proteins and degradation of misfolded proteins via its interaction with DNAJC10/ERdj5, probably to facilitate the release of DNAJC10/ERdj5 from its substrate (By similarity). Acts as a key repressor of the ERN1/IRE1-mediated unfolded protein response (UPR) (PubMed:1550958, PubMed:19538957). In the unstressed endoplasmic reticulum, recruited by DNAJB9/ERdj4 to the luminal region of ERN1/IRE1, leading to disrupt the dimerization of ERN1/IRE1, thereby inactivating ERN1/IRE1 (By similarity). Accumulation of misfolded protein in the endoplasmic reticulum causes release of HSPA5/BiP from ERN1/IRE1, allowing homodimerization and subsequent activation of ERN1/IRE1 (By similarity).
AA sequence	EDVGTVVGIDLGTTYSCVGVFKNGRVEIIANDQGNRITPSYVAFTPEGERLIGDA AKNQLTSNPENTVFDAKRLIGRTWNDPSVQQDIKFLPFKVVEKKTKPYIQVDIGG GQTKTFAPEEISAMVLTKMKETAEAYLGKKVTHAVVTVPAYFNDAQRQATKDA GTIAGLNVMRIINEPTAAAIAYGLDKREGEKNILVFDLGGGTFDVSLLTIDNGVFE VVATNGDTHLGGEDFDQRVMEHFIKLYKKKTGKDVRKDNRAVQKLRREVE
References	"The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC)." The MGC Project Team

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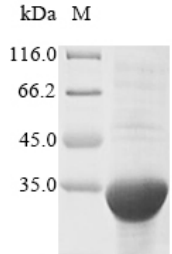
	Genome Res. 14:2121-2127(2004)

Certificate of Analysis

Product Name	Recombinant Human 78 kDa glucose-regulated protein(HSPA5),partial		
Catalog Number	RPC20182		
Expression host	*E.coli*		
Product Info	N-terminal 6xHis-tagged		
Storage Buffer	10 mM Tris-HCl, 1 mM EDTA, pH 8.0, 50% glycerol		
Batch Number	03739		
Nature	Human HSPA5-(AA 25-293)-**P11021**-Partial Protein		
Purification	Affinity purified using IMAC		
Recommended Storage	Short term	2 to 8 °C, one week from the date of receipt	
	Long term	-20 to -80 °C, six months from the date of receipt	
Form	Liquid		
Date of manufacture	2018.03.21		
Test Items	**Specifications**		**Results**
Appearance	Clear Solution		pass
Concentration	0.1-5 mg/ml, by the Bradford Method.		1 mg/ml
Purity	≥90%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.		90%

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Molecular Weight	Predicted band size: 33.6 kDa		Observed band size: 34 kDa

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