

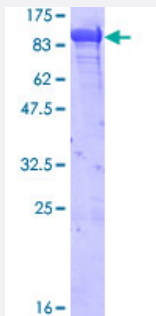
Full-Length

HSPA5 (Human) Recombinant Protein (P01)

Catalog # H00003309-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human HSPA5 full-length ORF (AAH20235.1, 19 a.a. - 654 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

EEEDKKEDVGTVVGIDLGTTYSCVGVFKNGRVEIANDQG NRITPSYVAF TPEGERLIGDAAKNQLT
SNPENTVFD AKRLIGRTWNDPSVQQDIKFLPFKVVEKKT KPYIQVDIGGGQTKTFAPEEISAMVLTK
MKETAEAYLGKKVTHAVVTPAYFNDAQRQATKDAGTIAGLNMRIINEPTAAAIA YGLDKREGEK
NILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDFDQRM EHFILYKKKTGKDVVRKDNRA
VQKLRRVEKAKRALSSQHQARIEIESFYEGEDFSETL TRAKFEELNMDLFRSTMKPVQKVLEDS
DLKKS DIDEVLVGGSTRIPKIQQLVKEFFNGKEPSRGINPDEAVAYGA AVQAGVLSGDQDTGDLV
LLDVCPLTLGIETVGGVMTKLIPRNTTVPTKKSQIFSTASDNQPTVTIKVYEGERPLTKDNHLLGTFD
LTGIPPAPRGVPQIEVTFEIDVNGILRVTAEDKGTGNKNKITITNDQNRLTPEEIERMVNDAEKFAEE
DKKLKERIDTRNELESYAYSLKNQIGDKEKLGGKLSSSEDKETMEKAVEEKIEWLESHQDADIEDFK
AKKKELEEVQPIISKLYGSAGPPPTGEEDTAEKDEL

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

95.7

Interspecies Antigen Sequence

Mouse (99); Rat (99)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — HSPA5

Entrez GeneID	3309
GeneBank Accession#	BC020235
Protein Accession#	AAH20235.1
Gene Name	HSPA5
Gene Alias	BIP, FLJ26106, GRP78, MIF2
Gene Description	heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)
Omim ID	138120
Gene Ontology	Hyperlink

Gene Summary	When Chinese hamster K12 cells are starved of glucose, the synthesis of several proteins, called glucose-regulated proteins (GRPs), is markedly increased. Hendershot et al. (1994) [PubMed 80 20977] pointed out that one of these, GRP78 (HSPA5), also referred to as 'immunoglobulin heavy chain-binding protein' (BiP), is a member of the heat-shock protein-70 (HSP70) family and is involved in the folding and assembly of proteins in the endoplasmic reticulum (ER). Because so many ER proteins interact transiently with GRP78, it may play a key role in monitoring protein transport through the cell.[supplied by OMIM]
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Other Designations

Heat-shock 70kD protein-5 (glucose-regulated protein, 78kD)|OTTHUMP00000022124|heat shock 70kD protein 5 (glucose-regulated protein, 78kD)|heat shock 70kDa protein 5

Publication Reference

- [Patient-derived tumor-reactive antibodies as diagnostic markers for ovarian cancer.](#)

Taylor DD, Gercel-Taylor C, Parker LP.

Gynecologic Oncology 2009 Oct; 115(1):112.

Application: WB-Re, Human, Serum

Pathway

- [Antigen processing and presentation](#)
- [Prion diseases](#)

Disease

- [Alzheimer disease](#)
- [Bipolar Disorder](#)
- [Carcinoma](#)
- [Cognition](#)
- [Disease Susceptibility](#)
- [Genetic Predisposition to Disease](#)
- [Hepatitis B](#)
- [Infection](#)
- [Kidney Failure](#)
- [Liver Neoplasms](#)
- [Parkinson disease](#)
- [Schizophrenia](#)

- [Stress](#)