

Product datasheet for **AR03018PU-N**

Heat shock protein 70 / HSP70 (active) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Heat shock protein 70 / HSP70 (active) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Concentration:	lot specific
Purity:	>90% pure as determined by SDS-PAGE analysis.
Buffer:	Presentation State: Purified State: Liquid affinity purified protein. Buffer System: 50 mM Tris/HCL, pH 7.5, 0.15 M NaCl, 10% Glycerol
Bioactivity:	Biological: The protein has ATPase activity at the time of manufacture of 3.3 μ M phosphate liberated/hr/ μ g protein in a 200 μ l reaction at 37°C (pH7.5) in the presence of 20 μ l of 1mM ATP using a Malachite Green assay.
Preparation:	Liquid affinity purified protein.
Applications:	ATPase Assay. Western B Control. Binding Assays. ELISA reference standard. Lipid Interaction Assays.
Protein Description:	Recombinant Human Hsp70 Protein with ATPase activity, his-tagged, cloned from a Human cDNA library
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_005336
Locus ID:	3303
UniProt ID:	P08107 , P0DMV8 , P0DMV9 , A8K5I0 , B3KTT5
Cytogenetics:	6p21.33
Synonyms:	HEL-S-103; HSP70-1; HSP70-1A; HSP70-2; HSP70.1; HSP70.2; HSP70I; HSP72; HSPA1



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Summary:

This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq, Jul 2008]

Protein Pathways:

Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Prion diseases, Spliceosome