

Recombinant Human HSPA8/HSC70 Protein (His Tag)

Catalog No. PKSH031146

Note: Centrifuge before opening to ensure complete recovery of vial contents.

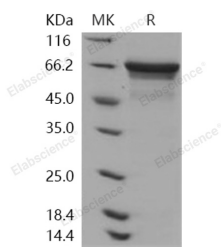
Description

Synonyms	HEL-33;HEL-S-72p;HSC54;HSC70;HSC71;HSP71;HSP73;HSPA10;LAP-1;LAP1;NIP71
Species	Human
Expression Host	E.coli
Sequence	Met 1-Asp 646
Accession	P11142-1
Calculated Molecular Weight	72.4 kDa
Observed molecular weight	65 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, 10% glycerol, pH 7.5 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

HSPA8, also known as HSC70, is a member of the heat shock protein family due to homology with other heat shock

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proteins. The heat shock protein 70 family is comprised by both heat-inducible and constitutively expressed members. The latter are called heat-shock cognate proteins. HSPA8 belongs to the heat-shock cognate subgroup. Members of the human heat-shock protein multigene family have several highly conserved proteins with structural and functional properties in common, but vary in the extent of their inducibility in response to metabolic stress. HSPA8 is constitutively expressed and performs functions related to normal cellular processes. This protein binds to nascent polypeptides to facilitate correct protein folding. It also functions as an ATPase in the disassembly of clathrin-coated vesicles during transport of membrane components through the cell. Two alternatively spliced variants have been characterized to date. HSPA8 acts as a repressor of transcriptional activation. It inhibits the transcriptional coactivator activity of CITED1 on Smad-mediated transcription. Isoform 2 may function as an endogenous inhibitory regulator of HSC70 by competing the co-chaperones. It also is a ATPase that works with auxilin to remove clathrin coated vesicles. In neurons, synaptojanin is also an important protein involved in vesicle uncoating.