Recombinant Protein Technical Manual

Recombinant Human HSPA8/HSC70 Protein (His Tag)

RPES1891

Product Data:

Product SKU: RPES1891

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: P11142

Protein Information:

Molecular Mass: 72.4 kDa

AP Molecular Mass: 65 kDa

Tag: N-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: HEL-33;HEL-S-72p;HSC54;HSC70;HSC71;HSP71;HSP73;HSPA10;LAP;LAP1;NIP71

Immunogen Information:

Sequence: Met 1-Asp 646

Background:

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