

RPB081Mu01 50µg

Recombinant Heat Shock 70kDa Protein 1A (HSPA1A)

Organism Species: Mus musculus (Mouse)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

10th Edition (Revised in Jan, 2014)

[PROPERTIES]

Residues: Met1~Asp641

Tags: N-terminal His-Tag

Accession: Q61696

Host: *E. coli*

Subcellular Location: Cytoplasm.

Purity: >95%

Endotoxin Level: <1.0EU per 1µg
(determined by the LAL method).

Formulation: Supplied as lyophilized form in 10mM PBS, pH7.4, containing 1mM DTT, 5% trehalose, 0.01% sarcosyl and preservative.

Predicted isoelectric point: 5.7

Predicted Molecular Mass: 71.6kDa

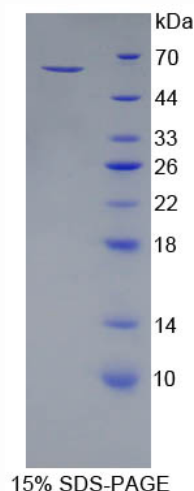
Accurate Molecular Mass: 60kDa as determined by SDS-PAGE reducing conditions.

Applications: SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

Note: The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.



[**USAGE**]

Reconstitute in sterile ddH₂O.

[**STORAGE AND STABILITY**]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

[**SEQUENCES**]

The sequence of the target protein is listed below.

MAKNTAIGID LGTTYSCVGV FQH GKVEIIA NDQGNRTTPS YVAFTDTERL IGDAAKNQVA
LNPQNTVFDA KRLIGRKFGD AVVQSDMKHW PFQVVNDGDK PKVQVNYKGE SRSFFPEEIS
SMVLTKMKEI AEAYLGHPVT NAVITVPAYF NDSQRQATKD AGVIAGLNVL RIINEPTAAA
IAYGLDRTGK GERNVLIFDL GGGTFDVSIL TIDDGIFEVK ATAGDTHLGG EDFDNRLVSH
FVEEFKRKHK KDISQNKRAV RRLRTACERA KRTLSSSTQA SLEIDSLFEG IDFYTSITRA
RFEELCSDLF RGTLEPVEKA LRDAKMDKAQ IHDLVLVGGS TRIPKVQKLL QDFFNGRDLN
KSINPDEAVA YGAAVQAAIL MGDKSENVQD LLLLDVAPLS LGLETAGGVM TALIKRNSTI
PTKQTQTFTT YSDNQPGVLI QVYEGERAMT RDNNLLGRFE LSGIPPAPRG VPQIEVTFDI
DANGILNVT TDKSTGKANK ITITNDKGRL SKKEIERMVQ EAERYKAEDE VQRDRVAAKN
ALESYAFNMK SAVEDEGLKG KLSEADKKKV LDKCQEVISW LDSNTLADKE EFVHKREELE
RVCSPISGL YQGAGAPGAG GFGAQAPKGA SGSGPTIEEV D

[**REFERENCES**]

1. Perry M.D., *et al.* (1994) Gene 146:273-278.
2. Hampton C.R., *et al.* (2003) Am. J. Physiol. Heart Circ. Physiol. 285:H866-74.
3. Belter J.G., *et al.* (2004) J. Appl. Physiol. 96:1270-1276.
4. Hunt C.R., *et al.* (2004) Mol. Cell. Biol. 24:899-911.