

Mouse Hsp40 (Hdj1) Monoclonal Antibody | anti-DNAJB1 antibody

Hsp40, Hdj1 Antibody: RPE

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103239	Mouse	Human, Mouse, Rat	Immunofluorescence, ELISA, Immunoprecipitation, Western Blot

PRODUCT SYNONYMS

Hsp40 (Hdj1); Monoclonal Antibody; Hsp40; Hdj1 Antibody: RPE; DNAJ1; NDAJB1; HDJ1; HSPF1; DnaJ homolog subfamily B member 1; Dna J protein homolog 1; Heat shock 40 kDa protein 1; HSP40; heat shock protein 40; Human DnaJ protein 1; hDj-1; anti-DNAJB1 antibody

PRODUCT SPECIFICATIONS

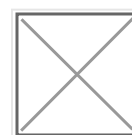
Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG1
Clone Number	3B9.E6
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	340
Applicable Applications for anti-DNAJB1 antibody	IF (Immunofluorescence), ELISA, IP (Immunoprecipitation), WB (Western Blot)
Conjugate	RPE
Storage Buffer	PBS pH7.2, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



WB (Western Blot)

Western Blot analysis of Human Cell lysates showing detection of Hsp40 protein using Mouse Anti-Hsp40 Monoclonal Antibody, Clone 3B9.E6. Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Hsp40 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



ICC (Immunocytochemistry)

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Hsp40 Monoclonal Antibody, Clone 3B9.E6. Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20 degree C. Primary Antibody: Mouse Anti-Hsp40 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.

ADDITIONAL INFORMATION

Related Product Information for anti-DNAJB1 antibody	<p>Background Info: Detects ~40kDa. Does not cross-react with Hdj2 or YDJ1.</p> <p>Scientific Background: Human Hsp40/DnaJ proteins comprise a large protein family, members of which feature the J domain (named after the bacterial DnaJ protein) (1). The J-domain spans the first 75 N-terminal amino acids and is separated from the C-terminal by a glycine/phenylalanine-rich domain (2). Members of the Hsp40/DnaJ family play diverse roles in many cellular processes, such as folding, translocation, degradation and assembly of multi-protein complexes. In particular, Hdj1, the first human Hsp40/DnaJ protein identified, plays an important role in protein translation and folding, as well as in the regulation of Hsp70 function (3). HSP40 stimulates the ATPase activity of HSP70 which in turn causes conformational changes of the unfolded proteins (4, 5). The Hsp40-Hsp70-unfolded protein complex further binds to co-chaperones Hip, Hop and HSP90 which leads to protein folding, or components of protein degradation machinery CHIP and BAG-1 (6). Some studies have shown that the difference between HDJ1 and type 1 DNAJ proteins including HDJ2 and yeast Ydj1 is the result of the possession of a zinc finger domain by the latter, which helps in the function of protein folding. (7, 8).</p>
Product Categories/Family for anti-DNAJB1 antibody	Heat Shock; Trafficking
References	1. Cheetham M.E. and Caplan A.J. (1998) Cell Stress Chaperones 3: 28-36. 2. Fan C.Y., et al. (2003) Cell Stress Chaperones 8: 309-316. 3. Sohn S.Y., Kim S.B., Kim J., and Ahn B.Y. (2006) J Gen Virol. 87(7): 1883-91. 4. Liberek K. et al. (1991) Proc. Natl. Acad. Sci. USA 88: 2874-2878. 5. Cyr D.M., et al. (1992) J Biol Chem. 267: 20927-20931. 6. Höhfeld J., et al. (2001) EMBO Rep. 2: 885-890. 7. Terda K., et al. (1997) J Cell Biol. 139: 1089-1095. 8. Lu Z. and Cyr D.M. (1998) J Biol Chem. 273: 27824-27830.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5453690
NCBI GeneID	3337
NCBI Accession #	NP_006136.1
NCBI GenBank Nucleotide #	NM_006145.2
UniProt Accession #	P25685
Molecular Weight	38,044 Da
NCBI Official Full Name	dnaJ homolog subfamily B member 1 isoform 1
NCBI Official Synonym Full Names	DnaJ (Hsp40) homolog, subfamily B, member 1
NCBI Official Symbol	DNAJB1
NCBI Official Synonym Symbols	Hdj1; Sis1; HSPF1; Hsp40; RSPH16B
NCBI Protein Information	dnaJ homolog subfamily B member 1; human DnaJ protein 1; dnaJ protein homolog 1; radial spoke 16 homolog B; heat shock 40 kDa protein 1
UniProt Protein Name	DnaJ homolog subfamily B member 1
UniProt Gene Name	DNAJB1
UniProt Synonym Gene Names	DNAJ1; HDJ1; HSPF1; HSP40; Heat shock protein 40; hDj-1
UniProt Entry Name	DNJB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.