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HSP40 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1334a

Product Information

Application	IHC-P, WB, E
Primary Accession	P25685
Other Accession	NP_006136
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	38044

Additional Information

Gene ID	3337
Other Names	DnaJ homolog subfamily B member 1, DnaJ protein homolog 1, Heat shock 40 kDa protein 1, HSP40, Heat shock protein 40, Human DnaJ protein 1, hDj-1, DNAJB1, DNAJ1, HDJ1, HSPF1
Target/Specificity	This HSP40 antibody is generated from rabbits immunized with a recombinant protein encoding full length of human HSP40.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HSP40 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DNAJB1
Synonyms	DNAJ1, HDJ1, HSPF1
Function	Interacts with HSP70 and can stimulate its ATPase activity. Acts also with TTC1 as a chaperone adapter that regulates HSP70- dependent folding process by interacting with the HSP70 amino terminal region

(PubMed:14503850). Stimulates the association between HSC70 and HIP. Negatively regulates heat shock-induced HSF1 transcriptional activity during the attenuation and recovery phase period of the heat shock response (PubMed:9499401). Stimulates ATP hydrolysis and the folding of unfolded proteins mediated by HSPA1A/B (in vitro) (PubMed:24318877).

Cellular Location Cytoplasm. Nucleus. Nucleus, nucleolus. Note=Translocates rapidly from the cytoplasm to the nucleus, and especially to the nucleoli, upon heat shock

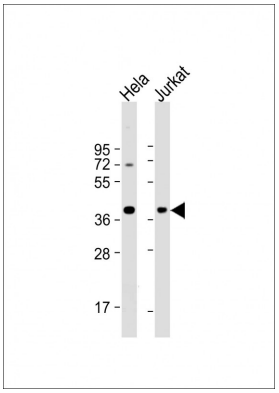
Background

DnaJ (Hsp40) belongs to the DnaJ-class of molecular chaperones with a C-terminal Zn finger domain. HSP40 (DnaJ) together with DnaK and GrpE form a molecular chaperone that is involved in formation of protein complexes, protein folding, prevention of protein aggregation, and protein turnover and export. Several human neurodegenerative diseases involve the expansion of a polyglutamine within the disease proteins. Molecular chaperones such as HSP40 complexes can modulate polyglutamine pathogenesis In transgenic Drosophila disease models of Machado-Joseph disease and Huntington disease Hdj1, the Drosophila homolog to human HSP40, demonstrates substrate specificity for polyglutamine proteins suppression in combination with other molecular chapterones of neurotoxicity, and altered solubility of mutant polyglutamine proteins.

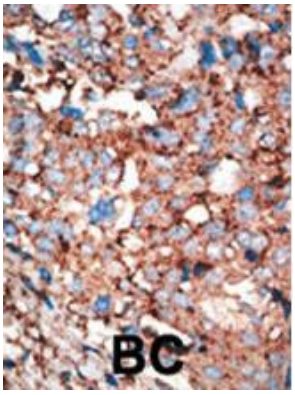
References

Ohtsuka, K., et al., Cell Stress Chaperones 5(2):98-112 (2000). Hata, M., et al., Biochim. Biophys. Acta 1397(1):43-55 (1998). Hata, M., et al., Genomics 38(3):446-449 (1996). Ohtsuka, K., Biochem. Biophys. Res. Commun. 197(1):235-240 (1993).

Images

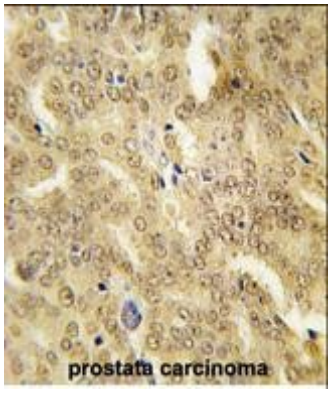


All lanes : Anti-HSP40 Antibody at 1:4000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Formalin-fixed and paraffin-embedded human prostata



carcinoma tissue reacted with HSP40 Antibody (Cat.#AP1334a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.