

DNAJA1 Rabbit pAb

Catalog # AP98888

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P31689
Other Accession	P31689
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44868
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HSP 40-4
Epitope Specificity	21-110/397
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 CR-type zinc finger. Contains 1 J domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	DnaJ-like proteins interact with HSP 70 molecular chaperones and function to facilitate protein folding and mitochondrial protein import. HSP 40-4, also known as HDJ2, is the human DnaJ homolog that functions as a co-chaperone with a cysteine-rich zinc finger domain. The cellular redox enzyme thioredoxin interacts with HSP 40-4, and oxidation and reduction reversibly regulate HSP 40-4 function in response to the changing redox states of the cell. The zinc finger domain of HSP 40-4 may act as a redox sensor of chaperone-mediated protein-folding machinery, since HSP 40-4 inactivation leads to the oxidation of cysteine thiols and a simultaneous release of coordinated zinc. Loss of the HSP 40-4 protein may be linked to severe defects in spermatogenesis that involve aberrant androgen signaling.

Additional Information

Gene ID	3301
Other Names	DJ-2; DjA1; HDJ2; HSDJ; HSJ-2; HSJ2; HSPF4; NEDD7; hDJ-2; DNJA1_HUMAN; DNAJA1; DnaJ protein homolog 2; Heat shock 40 kDa protein 4; Heat shock protein J2 (HSJ-2); Human DnaJ protein 2 (hDj-2); DNAJ2; DNJA1_MOUSE; DNJA1_RAT; DnaJ-like protein 1; Rdj1; DnaJ heat shock protein family (Hsp40) member A1; DnaJ (Hsp40) homolog, subfamily A, member 1; neural precursor cell expressed, developmentally down-regulated 7
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	DNAJA1
Synonyms	DNAJ2, HDJ2, HSJ2, HSPF4
Function	Co-chaperone for HSPA8/Hsc70 (PubMed: 10816573). Stimulates ATP hydrolysis, but not the folding of unfolded proteins mediated by HSPA1A (in vitro) (PubMed: 24318877). Plays a role in protein transport into mitochondria via its role as co-chaperone. Functions as a co- chaperone for HSPA1B and negatively regulates the translocation of BAX from the cytosol to mitochondria in response to cellular stress, thereby protecting cells against apoptosis (PubMed: 14752510). Promotes apoptosis in response to cellular stress mediated by exposure to anisomycin or UV (PubMed: 24512202).
Cellular Location	Membrane; Lipid- anchor. Cytoplasm. Microsome. Nucleus. Cytoplasm, perinuclear region. Mitochondrion Note=Primarily associated with microsomes. A minor proportion is associated with mitochondria (By similarity). Primarily cytoplasmic. A minor proportion is associated with nuclei.
Tissue Location	Ubiquitous. Isoform 2 is highly expressed in testis and lung, but detected at low levels in thymus, prostate, colon and liver.

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