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DNAJA1 Rabbit pAb

Catalog # AP98888

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P31689
Other Accession	P31689
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Sheep
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.

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