

# Anti-HDJ2 Antibody

Catalog # ABO10911

# Specification

# Anti-HDJ2 Antibody - Product Information

ApplicationWBPrimary AccessionP31689HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for DnaJ homolog subfamily A member 1(DNAJA1) of the second sec

Rabbit IgG polyclonal antibody for DnaJ homolog subfamily A member 1(DNAJA1) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-HDJ2 Antibody - Additional Information

Gene ID 3301

**Other Names** DnaJ homolog subfamily A member 1, DnaJ protein homolog 2, HSDJ, Heat shock 40 kDa protein 4, Heat shock protein J2, HSJ-2, Human DnaJ protein 2, hDj-2, DNAJA1, DNAJ2, HDJ2, HSJ2, HSPF4

Calculated MW 44868 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

Subcellular Localization

Membrane ; Lipid-anchor . Cytoplasm . Microsome . Nucleus . Cytoplasm, perinuclear region . Mitochondrion . Primarily associated with microsomes. A minor proportion is associated with mitochondria (By similarity). Primarily cytoplasmic. A minor proportion is associated with nuclei. .

### **Tissue Specificity**

Ubiquitous. Isoform 2 is highly expressed in testis and lung, but detected at low levels in thymus, prostate, colon and liver. .

**Protein Name** DnaJ homolog subfamily A member 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human HDJ2(369-384aa



NQERRRHYNGEAYEDD), identical to the related rat and mouse sequences.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 CR-type zinc finger.

## Anti-HDJ2 Antibody - Protein Information

Name DNAJA1

Synonyms DNAJ2, HDJ2, HSJ2, HSPF4

#### Function

Co-chaperone for HSPA8/Hsc70 (PubMed:<a href="http://www.uniprot.org/citations/10816573" target="\_blank">10816573</a>). Stimulates ATP hydrolysis, but not the folding of unfolded proteins mediated by HSPA1A (in vitro) (PubMed:<a

href="http://www.uniprot.org/citations/24318877" target="\_blank">24318877</a>). 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:<a href="http://www.uniprot.org/citations/14752510" target="\_blank">14752510</a>). Promotes apoptosis in response to cellular stress mediated by exposure to anisomycin or UV (PubMed:<a href="http://www.uniprot.org/citations/24512202" target="\_blank">24512202</a>).

#### **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

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### Anti-HDJ2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

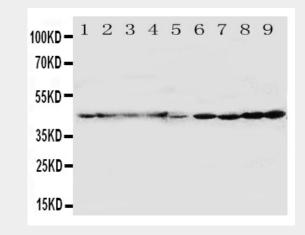
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



Flow Cytomety

<u>Cell Culture</u>

Anti-HDJ2 Antibody - Images



Anti-HDJ2 antibody, ABO10911, Western blottingAll lanes: Anti HDJ2 (ABO10911) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Lung Tissue Lysate at 50ugLane 3: Mouse Brain Tissue Lysate at 50ugLane 4: Mouse Lung Tissue Lysate at 50ugLane 5: U87 Whole Cell Lysate at 40ugLane 6: A549 Whole Cell Lysate at 40ugLane 7: COLO320 Whole Cell Lysate at 40ugLane 8: A431 Whole Cell Lysate at 40ugLane 9: HT1080 Whole Cell Lysate at 40ugPredicted bind size: 45KDObserved bind size: 45KD

# Anti-HDJ2 Antibody - Background

DNAJA1(DnaJ homolog subfamily A member 1), also called DJA1, HSDJ, HSPF4, is a protein that in humans is encoded by the DNAJA1 gene. The deduced 397-amino acid DNAJA1 protein is 32% identical to E. coli DnaJ, with the highest identity in the N-terminal region. Among the known DNAJ homologs in S. cerevisiae, DNAJA1 is most identical to YDJ1, which may be involved in the transport of certain proteins into the mitochondria and endoplasmic reticulum. Dja1 is expressed in mouse testis and prostate by immunohistochemical analysis and Western blot analysis. Transplantation experiments with fluorescence-tagged spermatogonia into Dja1 -/- mice revealed a primary defect of Sertoli cells in maintaining spermiogenesis at steps 8 and 9.