

### HSP40, YDJ1 Antibody

HSP40, YDJ1 Antibody, Clone 2A7.H6 Catalog # ASM10099

#### Specification

# HSP40, YDJ1 Antibody - Product Information

Application WB **Primary Accession** P25491 Other Accession NP 014335.1 Host Mouse Isotype IgG1 Kappa Reactivity Yeast Clonality Monoclonal Format HRP Description Mouse Anti-Yeast HSP40, YDJ1 Monoclonal IgG1 Kappa

**Target/Specificity** Detects ~40kDa. Yeast specific. Does not cross react with Human, Mouse or Rat.

## **Other Names**

DnaJ (HSP40) homolog subfmaily B member 1 antibody, DNAJ 1 antibody, DNAJ B1 antibody, DnaJ homolog subfamily B member 1 antibody, DnaJ protein homolog 1 antibody, DNAJ1 antibody, DNAJB 1 antibody, DNAJB1 antibody, DNAJB1 protein antibody, DNJB1\_HUMAN antibody, HDJ 1 antibody, HDJ-1 antibody, HDJ1 antibody, Heat shock 40 kDa protein 1 antibody, Heat shock 40kD protein 1 antibody, Heat shock protein 40 antibody, HSP 40 antibody, HSP40 antibody, HSPF 1 antibody, HSPF1 antibody, Human DnaJ protein 1 antibody, Radial spoke 16 homolog B antibody, RSPH16B antibody, Sis1 antibody

Immunogen Full length protein HSP40 (YDJ1)

Purification Protein G Purified

Storage Storage Buffer 50% glycerol, 0.09% sodium azide -20ºC

Shipping TemperatureBlue Ice or 4°CCertificate of Analysis0.5 μg/ml of SMC-166 was sufficient for detection of 50 ng YDJ1 by colorimetric immunoblot<br/>analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization Cytoplasm | Nucleus

# HSP40, YDJ1 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>

#### HSP40, YDJ1 Antibody - Images

 $201.5 \rightarrow \\ 156 \rightarrow \\ 106 \rightarrow \\ 79.68 \rightarrow \\ 48.33 \rightarrow \\ 37.81 \rightarrow \\ 23.27 \rightarrow \\ 18.19 \rightarrow \\ 14.17 \rightarrow \\ \end{cases}$ 

Western Blot analysis of Yeast recombinant cell lysate showing detection of Hsp40 protein using Mouse Anti-Hsp40 Monoclonal Antibody, Clone 2A7.H6 (ASM10099). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Hsp40 Monoclonal Antibody (ASM10099) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

### HSP40, YDJ1 Antibody - 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 YdjI is the result of the possession of a zinc finger domain by the latter, which helps in the function of protein folding. (7, 8).

### HSP40, YDJ1 Antibody - References

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- 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.



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- 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.