

### HSP40, YDJ1 Antibody

HSP40, YDJ1 Antibody, Clone 1G10.H8 Catalog # ASM10071

### Specification

# HSP40, YDJ1 Antibody - Product Information

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

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

**Other Names** DNAJA2 Antibody, CPR3 Antibody, HIRIP4 Antibody, DNAJ Antibody, DNJ3 Antibody, DJ3 Antibody, RDJ2 Antibody, HIRa interacting protein4 Antibody

Immunogen Full length protein yeast HSP40 (YDJ1)

**Purification** Protein G Purified

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

Blue Ice or 4ºC

Shipping Temperature **Certificate of Analysis** 0.5 µg/ml of SMC-150 was sufficient for detection of 50 ng YDJ1 by colorimetric immunoblot 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.

- Western Blot
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

# HSP40, YDJ1 Antibody - Images



Western Blot analysis of Yeast Cell lysates showing detection of Hsp40 protein using Mouse Anti-Hsp40 Monoclonal Antibody, Clone 1G10.H8 (ASM10071). Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Hsp40 Monoclonal Antibody (ASM10071) 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). There are two main types of HSP40; type 1 DNAJ proteins including HDJ2 and yeast YdjI; type II includes yeast Sis1 and human Hdj1. Whereas type I possesses a zinc finger domain which helps in the function of protein folding. (3, 4), type II does not.

Members of the HSP40/DnaJ family play diverse roles in many cellular processes, such as folding, translocation, degradation and assembly of multi-protein complexes. HSP40 stimulates the ATPase activity of HSP70 which in turn causes conformational changes of the unfolded proteins (5, 6). 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 (7).

# HSP40, YDJ1 Antibody - References

- 1. Cheetham M.E. and Caplan A.J. (1998) Cell Stress Chaperones 3: 28-36.
- 2. Fan C.Y., et al. (2003) Cell Stress Chaperones 8: 309-316.
- 3. Terda K., et al. (1997) J Cell Biol. 139: 1089-1095.
- 4. Lu Z. and Cyr D.M. (1998) J Biol Chem. 273: 27824-27830.
- 5. Liberek K. et al. (1991) Proc. Natl. Acad. Sci. USA 88: 2874-2878.
- 6. Cyr D.M., et al. (1992) J Biol Chem. 267: 20927-20931.
- 7. Höhfeld J., et al. (2001) EMBO Rep. 2: 885-890.