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HSP40, Hdj1 Antibody
HSP40, Hdj1 Antibody, Clone 3B9.E6
Catalog # ASM10065

Specification

HSP40, Hdj1 Antibody - Product Information

Application	**WB, IHC, ICC, IP, E**
Primary Accession	P25685
Other Accession	NP_006136.1
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**
Format	**Unconjugated**

Description
Mouse Anti-Human HSP40, Hdj1 Monoclonal IgG1

Target/Specificity
Detects ~40kDa. Does not cross-react with HDJ2 or YDJ1.

Other Names
DNAJ1 Antibody, NDAJB1 Antibody, HDJ1 Antibody, HSP40 Antibody, HSPF1 Antibody, DnaJ homolog subfamily B member 1 Antibody, Dna J protein homolog 1 Antibody, Heat shock 40 kDa protein 1 Antibody, HSP40 Antibody, heat shock protein 40 Antibody, Human DnaJ protein 1 Antibody, hDj-1 Antibody

Immunogen
Recombinant Protein HSP40 (Hdj1)

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.2, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
0.5 µg/ml of SMC-145 was sufficient for detection of HSP40 (HDJ1) in 15 µg of HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasm | Nucleus

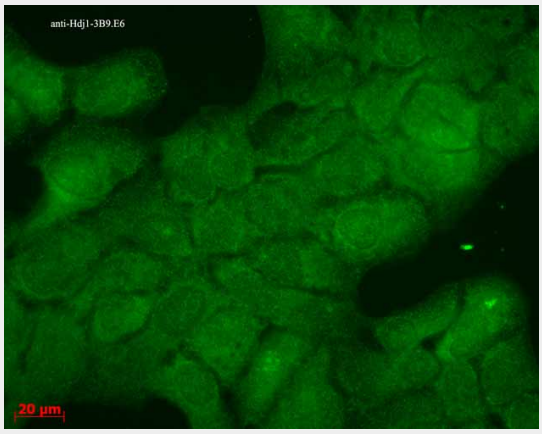
HSP40, Hdj1 Antibody - Protocols

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

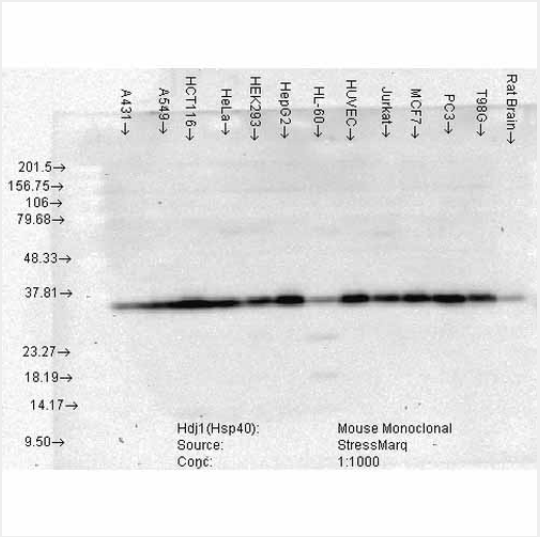
- Western Blot

- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HSP40, Hdj1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Hsp40 Monoclonal Antibody, Clone 3B9.E6 (ASM10065). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-Hsp40 Monoclonal Antibody (ASM10065) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Western Blot analysis of Human Cell lysates showing detection of Hsp40 protein using Mouse Anti-Hsp40 Monoclonal Antibody, Clone 3B9.E6 (ASM10065). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Hsp40 Monoclonal Antibody (ASM10065) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

HSP40, Hdj1 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, Hdj1 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. 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.
5. Cyr D.M., et al. (1992) J Biol Chem. 267: 20927–20931.
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.