

HSP40 Antibody

Catalog # ASM10445

Specification

HSP40 Antibody - Product Information

Application WB
Primary Accession Q8IHM7

Other Accession XP_001348169.2

Host Rabbit Clonality Polyclonal

Description

Rabbit Anti-P. Falciparum HSP40 Polyclonal

Target/Specificity

Detects \sim 62kDa. Specific to P. Falciparum and does not cross-react to any protein from Human erythrocytes.

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

C-terminal peptide of Pf11 0513 conjugated to KLH

Purification

Protein A Purified

Storage -20°C

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature Blue Ice or 4°C

Certificate of Analysis

 $0.9 \mu g/ml$ of SPC-184 was sufficient for detection of Pf11_0513 in 20 μg of P. falciparum lysate by colorimetric immunoblot analysis using Goat anti-rabbit lgG:HRP as the secondary antibody.

Cellular Localization

Cytoplasm | Nucleus

HSP40 Antibody - Protocols

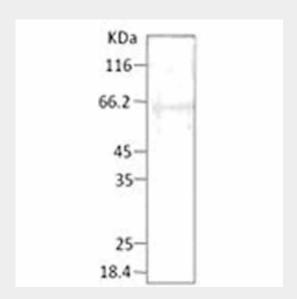
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HSP40 Antibody - Images



Western blot analysis of Parasite lysates showing detection of HSP40 protein using Rabbit Anti-HSP40 Polyclonal Antibody (ASM10445). Primary Antibody: Rabbit Anti-HSP40 Polyclonal Antibody (ASM10445) at 1:2000.

HSP40 Antibody - Background

DnaJ/HSP40 proteins have been preserved throughout evolution and are important for protein translation, folding, unfolding, translocation, and degradation, primarily by stimulating the ATPase activity of chaperone proteins, HSP70s. Because the ATP hydrolysis is essential for the activity of HSP70s, DnaJ/HSP40 proteins actually determine the activity of HSP70s by stabilizing their interaction with substrate proteins. DnaJ/HSP40 proteins all contain the J domain through which they bind to HSP70s.

HSP40, also known as HDJ1 (1), is a basic mammalian 40kDa heat shock protein which is not only homologous to the bacterial heat shock protein (DnaJ), but also yeast DnaJ-related proteins such as SCJ1, Sec63/Npl1, YDJ1 and SIS1 (2-6). HSP 40 is inducible by stress including heat after which is moves from the cytoplasm to the nucleus and nucleoli; an intracellular pattern similar to HSC70/HSP70, the mammalian homologues of the bacterial heat shock protein, DnaK (3). PF11_0513 belongs to the HSP40 family of chaperones. This protein has a Plasmodium export element (PEXEL). It is exported out of the parasite into the infected erythrocytic compartment.

HSP40 Antibody - References

- 1. Ohtsuka K. (1993) Biochem. Biophys. Res. Commun. 197: 235-240.
- 2. Melville M.W., et al. (1997) PNAS USA. 94: 97-102.
- 3. Hattori H., Let al. (1992) Cell Structure and Function. 17: 77-86.
- 4. Ohtsuka K. Masuda A., Nakai A., and Nagata K. (1990) Biochem. Biophys. Res. Commun. 166: 642-647.
- 5. Bardwell J.C.A., et al. (1986) J. Biol. Chem. 261: 1782-1785.
- 6. Ohku M., Tamura F., Nishimura S., and Uchida H. (1986) J. Biol. Chem. 261: 1778-1781.