SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

Anti-HSP90 (P. Falciparum) Antibody

Rabbit Anti-P. Falciparum HSP90 (P. Falciparum) Polyclonal
Catalog No. SPC-187

StressMarq Biosciences INC.
Discovery through partnership | Excellence through quality

Overview

Product Name

HSP90 (P. Falciparum) Antibody

Description

Rabbit Anti-P. Falciparum HSP90 (P. Falciparum) Polyclonal

Species Reactivity

Plasmodium falciparum

Applications

WB, ICC/IF, IP

Antibody Dilution

WB (1:2000), ICC/IF (1:50); optimal dilutions for assays should be determined by the user.

Host Species

Rabbit

Immunogen Species

P. Falciparum

Immunogen

Recombinant full length PfHSP90

Concentration

1.56 mg/ml

Conjugates

Alkaline Phosphatase, APC, ATTO 390, ATTO 488, ATTO 565, ATTO 594, ATTO 633, ATTO 655, ATTO 680, ATTO 700, Biotin, FITC, HRP, PE/ATTO 594, PerCP, RPE, Streptavidin, Unconjugated

Properties

Storage Buffer

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

Storage Temperature

-20ºC

Shipping Temperature

Blue Ice or 4ºC

Purification

Protein A purified

Clonality

Polyclonal

Specificity

Detects ~ 86kDa. Specific to P. Falciparum and does not cross-react to HSP90 from Human, yeast, and dictyostelium.

Cite This Product

Rabbit Anti-P. falciparum HSP90 Polyclonal (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SPC-187)

Certificate Of Analysis

0.7 µg/ml of SPC-187 was sufficient for detection of PfHSP90 in 20 µg of P. falciparum lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

Biological Description

Alternative Names

PF14_0417 HSP90 Antibody, Heat shock 86 kDa antibody, heat shock 90kDa protein 1 alpha antibody, Heat shock protein 90kDa alpha cytosolic class A member 1 antibody, Heat shock protein 90kDa alpha cytosolic class B member 1 antibody, Heat shock protein HSP 90 alpha antibody, Heat shock protein HSP 90 beta antibody, Heat shock protein HSP 90-alpha antibody, HSP 84 antibody, HSP 86 antibody, HSP 90 antibody, HSP90 Beta antibody, HSP90A antibody, HSP90AA1 antibody, HSP90AB1 antibody, HSP90B antibody, HSP90N antibody, HSPC1 antibody, HSPC2 antibody, HSPCA antibody, HSPCAL1 antibody, HSPCAL4 antibody, HSPCB antibody, HSPN antibody

Research Areas

Cancer, Heat Shock

Cellular Localization

Cytoplasm, Melanosome

Accession Number

XP_001348591.1

Gene ID

811999

Swiss Prot

Q8IL32

Scientific Background

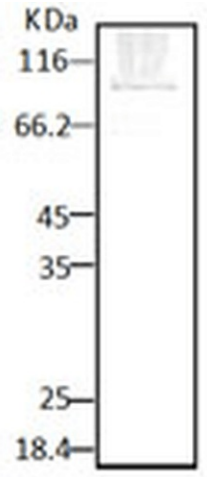
HSP90 is an abundantly and ubiquitously expressed heat shock protein. It is understood to exist in two principal forms α and β, which share 85% sequence amino acid homology. The two isoforms of HSP90 are expressed in the cytosolic compartment (1). Despite the similarities, HSP90α exists predominantly as a homodimer while HSP90β exists mainly as a monomer.(2) From a functional perspective, HSP90 participates in the folding, assembly, maturation, and stabilization of specific proteins as an integral component of a chaperone complex. (3-6) Furthermore, HSP90 is highly conserved between species; having 60% and 78% amino acid similarity between mammalian and the corresponding yeast and Drosophila proteins, respectively. HSP90 is a highly conserved and essential stress protein that is expressed in all eukaryotic cells. Despite its label of being a heat-shock protein, HSP90 is one of the most highly expressed proteins in unstressed cells (1–2% of cytosolic protein). It carries out a number of housekeeping functions – including controlling the activity, turnover, and trafficking of a variety of proteins. Most of the HSP90-regulated proteins that have been discovered to date are involved in cell signaling (7-8). The number of proteins now know to interact with HSP90 is about 100. Target proteins include the kinases v-Src, Wee1, and c-Raf, transcriptional regulators such as p53 and steroid receptors, and the polymerases of the hepatitis B virus and telomerase.5 When bound to ATP, HSP90 interacts with co-chaperones Cdc37, p23, and an assortment of immunophilin-like proteins, forming a complex that stabilizes and protects target

proteins from proteasomal degradation. In most cases, HSP90-interacting proteins have been shown to co-precipitate with HSP90 when carrying out immune adsorption studies, and to exist in cytosolic heterocomplexes with it. In a number of cases, variations in HSP90 expression or HSP90 mutation has been shown to degrade signaling function via the protein or to impair a specific function of the protein (such as steroid binding, kinase activity) in vivo. Ansamycin antibiotics, such as geldanamycin and radicicol, inhibit HSP90 function (9). Recently, Prof. Tatu's laboratory has shown the importance of HSP90 in parasite growth. They have shown that inhibition of P. Falciparum HSP90 (PfHSP90), blocks the erythrocytic cycle by inhibiting stage transformation, leading to inhibition of parasite growth (10, 11). Looking for more information on HSP90? Visit our new HSP90 Scientific Resource Guide at http://www.HSP90.ca.

References

1. Nemoto T., et al. (1997) J. Biol Chem. 272: 26179-26187.
2. Minami Y., et al. (1991) J. Biol Chem. 266: 10099-10103.
3. Arlander S.J.H., et al. (2003) J. Biol Chem. 278: 52572-52577.
4. Pearl H., et al. (2001) Adv Protein Chem. 59: 157-186.
5. Neckers L., et al. (2002) Trends Mol Med. 8: S55-S61.
6. Pratt W., Toft D. (2003) Exp Biol Med. 228: 111-133.
7. Pratt W., Toft D. (1997) Endocr Rev. 18: 306360.
8. Pratt W.B. (1998) Proc Soc Exptl Biol Med. 217: 420434.
9. Whitesell L., et al. (1994) Proc Natl Acad Sci USA. 91: 83248328.
10. Banumathy G., Singh V., Pavithra S.R., and Tatu U. (2003) J Biol Chem. 278(20): 18336-45.
11. Pavithra S.R, Banumathy G., Joy O., Singh V., and Tatu U. (2004) J Biol Chem. 279(45):46692-9.

Product Images



Western blot analysis of Parasite Lysates showing detection of HSP90 protein using Rabbit Anti-HSP90 Polyclonal Antibody (SPC-187). Primary Antibody: Rabbit Anti-HSP90 Polyclonal Antibody (SPC-187) at 1:2000.

Product Citations (1)

Immunoprecipitation

A Purine Analog Synergizes with Chloroquine (CQ) by Targeting Plasmodium falciparum Hsp90 (PfHsp90).

Shahinas, D. et al. -2013 PLoS ONE. 8(9): e75446.

PubMed ID: 24098696 **Reactivity:** W2 parasite **Applications:** Immunoprecipitation

Reviews

Based on validation through cited publications.

★★★★★

StressMarq Biosciences
June 15, 2016: