

PRODUCT INFORMATION



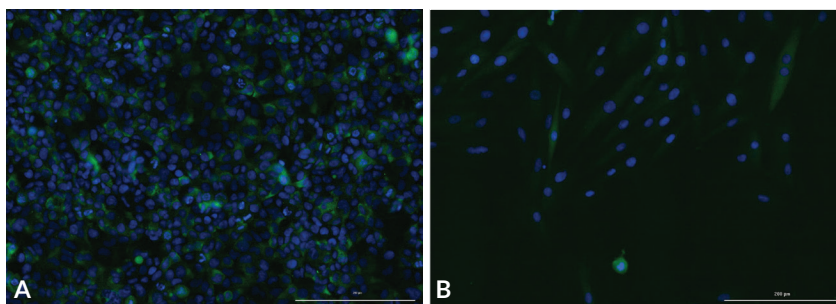
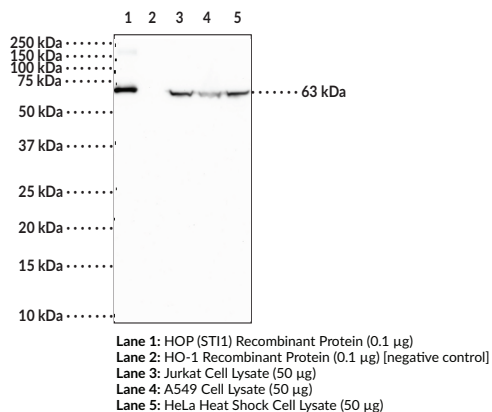
HOP (STI1) Polyclonal Antibody

Item No. 24529

Overview and Properties

Contents: This vial contains 100 µg of protein A-purified polyclonal antibody.
Synonyms: HOP, Hsc70/Hsp90 Organizing Protein, Renal Carcinoma Antigen NY-REN-11, Stress-Induced Phosphoprotein 1, Transformation-sensitive Protein IEF SSP 3521
Immunogen: Human recombinant HOP
Species Reactivity: (+) Human and rat; other species not tested
Uniprot No.: P31948
Form: Liquid
Storage: -20°C (as supplied)
Stability: ≥3 years
Storage Buffer: PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host: Rabbit
Applications: ELISA, immunofluorescence (IF), and Western blot (WB); the recommended starting dilution for IF and WB is 1:200 and 1:1,000, respectively. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Panel A: Immunofluorescent staining of Huh-7 (human liver) cells. HOP (STI1) Polyclonal Antibody at dilution of 1:200 followed by Goat Anti-Rabbit IgG FITC (Item No. 10006588) (green) and Hoechst nuclear stain (blue). Panel B: Immunofluorescent staining of H9C2 (rat myoblast) cells. HOP (STI1) Polyclonal Antibody at dilution of 1:100 followed by Goat Anti-Rabbit IgG FITC (Item No. 10006588) (green) and Hoechst nuclear stain (blue).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/22/2019

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Hsp70/Hsp90 organizing protein (HOP), also known as stress-induced phosphoprotein 1 (STI1 or STIP1), is a co-chaperone that reversibly forms a complex with heat shock protein 70 (Hsp70) and Hsp90 during the Hsp90 chaperone cycle to facilitate the transfer of client proteins from Hsp70 to Hsp90. It contains three tetratricopeptide repeat domains (TPR1, TPR2A, and TPR2B) that act as binding regions, with TPR1 and TPR2B binding to Hsp70 (Item Nos. 22739 | 23002) and TPR2A binding to Hsp90 (Item Nos. 22734 | 22735).¹ HOP is both a nuclear and cytoplasmic protein, capable of travel between both.² HOP has also been found to interact with several other proteins and complexes, including but not limited to Hsc70 (Item No. 22737), PACRG, METTL21B, FLCN, FNIP1, and FNIP2.³⁻⁷ Cayman's HOP (STI1) Polyclonal Antibody detects HOP (STI1) at 63 kDa.

References

1. Flom, G., Behal, R.H., Rosen, L., *et al.* Definition of the minimal fragments of STI1 required for dimerization, interaction with Hsp70 and Hsp90 and *in vivo* functions. *Biochem J.* **404(1)**, 159-167 (2007).
2. Schmid, A.B., Lagleder, S., Gräwert, M.A., *et al.* The architecture of functional modules in the Hsp90 co-chaperone STI1/Hop. *EMBO J.* **31(6)**, 1506-1517 (2012).
3. Harst, A., Lin, H., and Obermann, W.M. Aha1 competes with Hop, p50 and p23 for binding to the molecular chaperone Hsp90 and contributes to kinase and hormone receptor activation. *Biochem J.* **387(Pt. 3)**, 789-796 (2005).
4. Imai, Y., Soda, M., Murakami, T., *et al.* A product of the human gene adjacent to parkin is a component of Lewy bodies and suppresses Pael receptor-induced cell death. *J. Biol. Chem.* **278(51)**, 51901-51910 (2003).
5. Cloutier, P., Lavallée-Adam, M., Faubert, D., *et al.* A newly uncovered group of distantly related lysine methyltransferases preferentially interact with molecular chaperones to regulate their activity. *PLoS Genet.* **9(1)**, 1-13 (2013).
6. Silverstein, A.M., Galigniana, M.D., Chen, M.S., *et al.* Protein phosphatase 5 is a major component of glucocorticoid receptor.hsp90 complexes with properties of an FK506-binding immunophilin. *J. Biol. Chem.* **272(26)**, 16224-16230 (1997).
7. Woodford, M.R., Dunn, D.M., Blanden, A.R., *et al.* The FNIP co-chaperones decelerate the Hsp90 chaperone cycle and enhance drug binding. *Nat. Commun.* **7**, 12037 (2016).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM