

HOP (STIP1, p60) Monoclonal Antibody (DS14F5)

Product Specifications

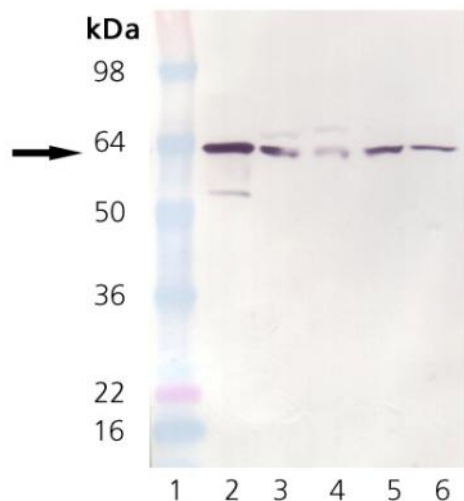
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| Catalog Number: | SRA-1500 |
| Source: | Mouse |
| Isotype: | IgG ₁ |
| Species Reactivity: | Human, mouse, rat, bovine, canine, chicken, guinea pig, hamster, mink, monkey, pig, rabbit, sheep, <i>Xenopus</i> Other species not tested. |
| Applications: | WB ^{1,17} : 1:1000 (Colorimetric) Other applications not tested. <i>The optimal dilution for a specific application must be determined by the investigator.</i> |
| Predicted M.W.: | ~60 kDa |
| Concentration: | See product label |
| Purification: | Protein G Affinity |
| Format: | PBS, pH 7.2, 0.09% azide, 50% glycerol |
| Storage: | -20°C <i>Shipping conditions may differ from the recommended storage temperature.</i> |
| Immunogen: | Chicken HOP (p60) ¹ |
| Related Products: | |
| SRP-1510 | HOP (STIP1, p60) Recombinant Human Protein |
| LYC-HL100 | HeLa Cell Lysates |
| LYC-PC100 | PC-12 Cell Lysates |
| SAB-101 | Goat anti-Mouse Polyclonal Antibody, AP Conjugate |

Background:

Hsp70-Hsp90 Organizing Protein (HOP, STIP1, p60) is an ~60kDa protein that is a critical intermediate component for the efficient maturation of steroid receptor complexes¹⁻³, serving to recruit Hsp90 to Hsp70-containing complexes. Unactivated steroid hormone receptors are found in hetero-oligomeric complexes that are thought to stabilize a partially folded receptor polypeptide prior to hormone-dependent activation⁴⁻⁶. Hsp70 and Hsp90 are both known to associate with steroid hormone receptors. Numerous studies⁷⁻¹² have shown that Hsp70 functions in an ATP-dependent manner through transient interactions to mediate folding or unfolding of polypeptide chains. Hsp90 is thought to perhaps also function in some capacity related to folding or protein-protein interactions¹³. HOP contains three tetratricopeptide repeat (TPR) domains, TPR1, TPR2a and TPR2b. Hsp70 binding has been localized to TPR1, and Hsp90 binding has been localized to TPR2a. Importantly, the highly conserved EEVD sequence that terminates many Hsp70 family members, and the similar MEEVD sequence that terminates Hsp90, are important recognition sites for the TPR domains. The co-crystal structures for TPR1 plus a GPTIEVD octapeptide (Hsp70 sequence) and TPR2a plus the MEEVD pentapeptide (Hsp90) have been solved¹⁴. HOP is closely related to a human 63 kDa protein that is sensitive to simian virus SV40 transformation¹⁵ and is related to the yeast heat shock-responsive STI1 gene product¹⁶.

References:

- Chen, S. *et al.* (1998) *J Biol Chem.* **273**, 35194-35200.
- Dittmar, K.D. *et al.* (1996) *J Biol Chem.* **271**, 12833-12839.
- Kosano, H. *et al.* (1998) *J Biol Chem.* **273**, 32973-32979.
- Smith, D.F. *et al.* (1993) *Mol Cell Biol.* **13**, 869-876.
- Catelli, M.G. *et al.* (1985) *EMBO J.* **4**, 3131-3135.
- Schuh, S. *et al.* (1985) *J Biol Chem.* **260**, 14292-14296.
- Beckmann, R.P. *et al.* (1990) *Science* **248**, 850-854.
- Chappell, T.G. *et al.* (1986) *Cell* **45**, 3-12.
- Rothman, J.E. (1989) *Cell* **59**, 591-601.
- Chirico, W.J. *et al.* (1988) *Nature (London)* **332**, 805-810.
- Deshales, R.J. *et al.* (1988) *Nature (London)* **332**, 8000-805.
- Zimmerman, R.M. *et al.* (1988) *EMBO J.* **7**, 2875-2880.
- Ang, D.K. *et al.* (1991) *J Biol Chem.* **266**, 24233-24236.
- Scheufler, C. *et al.* (2000) *Cell* **101**, 199-210.
- Honoré, B.H. *et al.* (1992) *J Biol Chem.* **267**, 8485-8491.
- Nicolet, C.M. *et al.* (1989) *Mol Cell Biol.* **9**, 3638-3646.
- Graumann, K. *et al.* (2000) *Biochem J* **345**, 627-636.



Western Blot Analysis of HOP (p60) mAb (DS14F5):

Lane 1: MWM, Lane 2: HOP recombinant Human Protein,
Lane 3: HeLa, Lane 4: PC-12, Lane 5: L-929, Lane 6:
CHO-K1

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