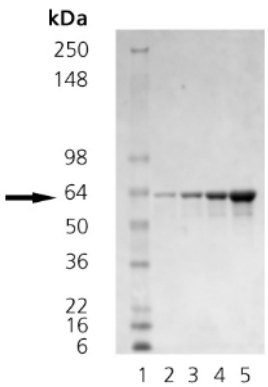
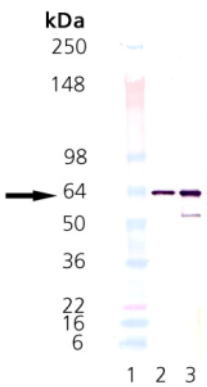
Human HOP (p60) Protein

Product Specifications

Catalog Number:	SRP-1510
Product Description:	Human recombinant HOP (p60) protein
Format:	DPBS
Application:	WB Control: Colorimetric 100 ng of protein recommended *The optimal dilution for a specific application must be determined by the investigator*
Purity:	>90% pure as determined by SDS-PAGE and Western blot analyses
Molecular Weight:	~ 60 kDa observed
Concentration:	See product label
Storage:	Store at -70°C *Shipping conditions may differ from the recommended storage temperature*
Related Products:	
SRA-1500	Anti-HOP (p60) monoclonal antibody
SAB-101	Goat anti-Mouse IgG Polyclonal Antibody, AP Conjugate
EKS-700B	Hsp70 ELISA kit
SPP-763	Hsp70 active recombinant protein
EKS-895	HSP90α ELISA Kit
SPP-770	Hsp90 native protein



SDS-PAGE analysis of SRP-1510 stained with Coomassie Blue. Lane 2: 0.5 µg, Lane 3: 1 µg, Lane 4: 2 µg, Lane 5: 5 µg purified HOP protein. Lane 1: SeeBlue Molecular Weight Standard



Western blot analysis of SRP-1510 probed with Anti-HOP (p60) monoclonal antibody (SRA-1500) at 1 µg/mL. Lane 2: 50 ng, Lane 3: 100 ng purified HOP protein; Lane 1: SeeBlue Molecular Weight Standard.

Background:

Hsp70-Hsp90 Organizing Protein (HOP, p60) is an ~60kDa protein that is a critical intermediate component for the efficient maturation of steroid receptor complexes[1-3], 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 activation[4-6]. Hsp70 and Hsp90 are both known to associate with steroid hormone receptors. Numerous studies[8-13] 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 interactions[14]. HOP contains three tetratricopeptide repeat (TPR) domains, TPR1, TPR2a and TPR2b. Hsp70 binding has been localized to TPR1, and sp90 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 GPTIEEVD octapeptide (Hsp70 sequence) and TPR2a plus the MEEVD pentapeptide (Hsp90) have been solved[15]. HOP is closely related to a human 63 kDa protein that is sensitive to simian virus SV40 transformation[16] and is related to the yeast heat shock-responsive STI1 gene product[17].

References:

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