

## Polyclonal Antibody to SEC23A - Aff - Purified

<b>Alternate names:</b>	COPII, Coat Protein 2, Protein transport protein Sec23A, SEC23-related protein A
<b>Catalog No.:</b>	AP10308PU-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1-1.25 mg/ml
<b>Background:</b>	<p>The regulation of intracellular vesicular trafficking is mediated by specific families of proteins that are involved in vesicular budding, translocation, and fusion with target membranes. The protein trafficking between endoplasmic reticulum (ER) and Golgi apparatus is mediated by two distinct membrane coat complexes, COPI and COPII (1). Two Coat protein II (COPII) proteins are necessary to generate secretory vesicles at the endoplasmic reticulum. COPI consist of 7 protein subunits including a, b, b1, d, e, d, z. COPI is also responsible for the retrograde golgi to ER transport of dilysine-tagged proteins (2). Sec23A is a functional human counterpart of the yeast COPII component Sec23p which suggests that it plays similar role in the mammalian protein export from ER. Both Sec 23 isoforms (Sec23A and Sec23B) have similar molecular weight 85 kDa and are co-expressed in many human tissues at varying levels of expression. In yeast, the Sec24p protein is the only COPII component in which two close orthologues have been identified. Sec-23p is a component of coat protein II (COPII) coated vesicles involved in protein export from the endoplasmic reticulum (Mizoguchi et. al., 2000). The COPII is required for the vesicle budding from the endoplasmic reticulum and is consist of two heterodimeric subcomplexes, Sec23p/Sec24p and Sec13p/Sec31p and a small GTPase Ser1p (Higashio et al., 2000). Recent data also suggest that Sec23p/Sec24p complexes are in addition to its role in the shaping up of the vesicle, the Sec23-24p complex may be implicated in cargo selection and trafficking of the amount of cargo within the cells.</p>
<b>Uniprot ID:</b>	<a href="#">Q15436</a>
<b>NCBI:</b>	<a href="#">NP_006355</a>
<b>GeneID:</b>	<a href="#">10484</a>
<b>Host / Isotype:</b>	Rabbit / IgG
<b>Immunogen:</b>	This antibody was generated in rabbits against synthetic peptides from the unique sequence to Sec23 protein.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction. <b>Purification:</b> Affinity Chromatography using immobilized antigen. <b>Buffer System:</b> Stabilization buffer.
<b>Applications:</b>	Western Blot: > 1/500. Immunoprecipitation and i.p pull-down assays: > 1/350. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody detects a single 89 kDa protein in Jurkat cell extracts. It does not cross react with other proteins.  
The antibody does immunoprecipitates solubilized Sec23 protein form Jurkat cell extracts.

**Species Reactivity:** **Tested:** Human.

**Storage:** Store the antibody undiluted (in aliquots) at -20°C.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:**

1. Weidler, M., Reinhard C., Friedrich G., et. Al., Biochem. Biophys. Res. Comm. 271, 401-408, 2000.
2. Botelho R. J., Hackam D. J., et. Al., J. Biol. Chem. 275, 10655-10660, 2000.
3. Mizoguchi T, Nakajima K, Hatsuzawa K, Nagahama M, Hauri HP, Tagaya M, et al. Determination of functional regions of p125, a novel mammalian Sec23p-interacting protein. Biochem Biophys Res Commun. 2000 Dec 9;279(1):144-9. PubMed PMID: 11112430.

**Pictures:** Wesern Blot using Sec23 antibody  
AP10308PU-N

