

#8162 Store at -20C

## Sec23A Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	82	Rabbit	#Q15436	10484

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
1:50

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

Sec23A Antibody recognizes endogenous levels of total Sec23A protein. Based on sequence homology, this antibody may cross-react with Sec23B.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Phe717 of human Sec23A protein. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

There are two isoforms of Sec23 protein: Sec23A and Sec23B. Both isoforms have been shown in the Sec23/24 complex, which is a component of COPII coat (1). COPII is composed of at least five proteins: the Sec23/24 complex, the Sec13/31 complex, and Sar1. COPII coat is located at the ER/Golgi interface and involved in transport of newly synthesized proteins from the ER to the Golgi apparatus (2). COPII formation is initiated through binding of the activated G protein, Sar1, to the Sec23/24 complex to form a prebudding complex, which directly binds target molecules (2-4). The prebudding complex further recruits Sec13/31 to form mature COPII coat (5,6). In addition to being a COPII component, Sec23 has also been shown to interact with p125 and Sec16 at the transitional ER; these interactions are important for regulation of the COPII transportation function (7,8).

### Background References

1. Paccaud, J.P. et al. (1996) *Mol Biol Cell* 7, 1535-46.
2. Aridor, M. et al. (1998) *J Cell Biol* 141, 61-70.
3. Miller, E.A. et al. (2003) *Cell* 114, 497-509.
4. Mossessova, E. et al. (2003) *Cell* 114, 483-95.
5. Barlowe, C. et al. (1994) *Cell* 77, 895-907.
6. Bi, X. et al. (2007) *Dev Cell* 13, 635-45.
7. Iinuma, T. et al. (2007) *J Biol Chem* 282, 17632-9.
8. Hughes, H. et al. (2009) *J Cell Sci* 122, 2924-34.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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