



Datasheet for ABIN968830  
**anti-SEC31A antibody (AA 522-719)**



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## Overview

Quantity:	50 µg
Target:	SEC31A
Binding Specificity:	AA 522-719
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SEC31A antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

## Product Details

Immunogen:	Human Sec31A aa. 522-719
Clone:	32-Sec31A
Isotype:	IgG1
Characteristics:	<ol style="list-style-type: none"><li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li><li>2. Please refer to us for technical protocols.</li><li>3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li><li>4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li></ol>
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

## Target Details

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Target: SEC31A

Alternative Name: Sec31A ([SEC31A Products](#))

Background: Eukaryotic protein trafficking involves packaging of target molecules into membranous vesicles that bud from a donor compartment, travel to a specific destination, fuse, and release their contents into an acceptor compartment. Vesicles that bud from the Golgi cisternae and from the ER contain a non-clathrin based coat. This coat is an oligomeric complex whose subunits are termed COPs (coatamer proteins). COPI is the golgi- and endosome-associated COP complex, while COPII is the ER-associated coat complex. In yeast, the COPII complex has a cargo binding subcomplex that includes Sar1p, Sec23p, and Sec24p, which recruits Sec13p and Sec31p leading to vesicle formation. The human homologues of Sec31p are Sec31A and Sec31B. Sec31A has 40% identity with Sec31B, and contains an N-terminal WD-40 domain and a C-terminal proline-rich region. Sec31A mRNA is widely expressed, while Sec31B is found only in testis and thymus. In HeLa, Sec31A localizes to vesicular structures in the perinuclear region of the cell, and co-localizes with the COPII component Sec13. Antibodies against Sec31A inhibit ER to Golgi transport of vesicular stomatitis G protein. Thus, Sec31 may be an important COPII component involved in ER to Golgi transport, as well as a marker for COPII vesicles.

Molecular Weight: 148 kDa

Pathways: [ER-Nucleus Signaling](#)

## Application Details

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Comment: Related Products: ABIN968537, ABIN967389

Restrictions: For Research Use only

## Handling

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Format: Liquid

Concentration: 250 µg/mL

Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

## Handling

Storage Comment: Store undiluted at -20° C.

## Publications

Product cited in: Tang, Ong, Huang, Wei, Wong, Qi, Horstmann, Hong: "A membrane protein enriched in endoplasmic reticulum exit sites interacts with COPII." in: **The Journal of biological chemistry**, Vol. 276, Issue 43, pp. 40008-17, (2001) ([PubMed](#)).

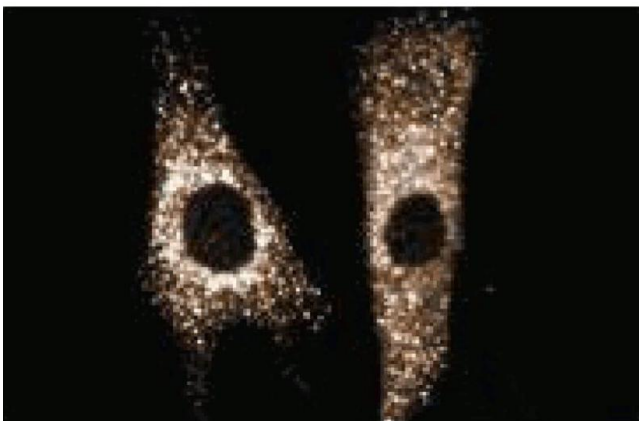
Tang, Zhang, Low, Wong, Horstmann, Hong: "Mammalian homologues of yeast sec31p. An ubiquitously expressed form is localized to endoplasmic reticulum (ER) exit sites and is essential for ER-Golgi transport." in: **The Journal of biological chemistry**, Vol. 275, Issue 18, pp. 13597-604, (2000) ([PubMed](#)).

## Images



### Western Blotting

**Image 1.** Western blot analysis of Sec31A on Jurkat cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Sec31A antibody.



### Immunofluorescence

**Image 2.** Immunofluorescent staining of Hs68 cells.