

## Mouse Monoclonal Antibody to SEC31A

Purified Mouse Monoclonal Antibody Catalog # AO2339a

#### **Specification**

## Mouse Monoclonal Antibody to SEC31A - Product Information

Application E, WB, IHC
Primary Accession O94979
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse IgG1
Calculated MW 133kDa KDa

**Description** 

The protein encoded by this gene shares similarity with the yeast Sec31 protein, and is a component of the outer layer of the coat protein complex II (COPII). The encoded protein is involved in vesicle budding from the endoplasmic reticulum (ER) and contains multiple WD repeats near the N-terminus and a proline-rich region in the C-terminal half. It associates with the protein encoded by the SEC13 homolog, nuclear pore and COPII coat complex component (SEC13), and is required for ER-Golgi transport. Monoubiquitylation of this protein by CUL3-KLHL12 was found to regulate the size of COPII coats to accommodate unusually shaped cargo. Alternative splicing results in multiple transcript variants encoding different isoforms.;

### **Immunogen**

Purified recombinant fragment of human SEC31A (AA: 429-571) expressed in E. Coli.

#### **Formulation**

Purified antibody in PBS with 0.05% sodium azide

#### **Application Note**

ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000;

#### Mouse Monoclonal Antibody to SEC31A - Additional Information

**Gene ID 22872** 

#### **Other Names**

ABP125; ABP130; HSPC275; HSPC334; SEC31L1

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Mouse Monoclonal Antibody to SEC31A is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Monoclonal Antibody to SEC31A - Protein Information



#### Name SEC31A

## Synonyms KIAA0905, SEC31L1

#### **Function**

Component of the coat protein complex II (COPII) which promotes the formation of transport vesicles from the endoplasmic reticulum (ER) (PubMed:<a

href="http://www.uniprot.org/citations/10788476" target="\_blank">10788476</a>). The coat has two main functions, the physical deformation of the endoplasmic reticulum membrane into vesicles and the selection of cargo molecules (By similarity).

#### **Cellular Location**

Cytoplasm. Cytoplasmic vesicle, COPII-coated vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Endoplasmic reticulum membrane; Peripheral membrane protein. Cytoplasm, cytosol. Note=Associates with membranes in a GTP- dependent manner (By similarity). Localizes to endoplasmic reticulum exit sites (ERES), also known as transitional endoplasmic reticulum (tER) (PubMed:25201882, PubMed:28442536, PubMed:17428803) {ECO:0000250|UniProtKB:Q9Z2Q1, ECO:0000269|PubMed:17428803, ECO:0000269|PubMed:25201882, ECO:0000269|PubMed:28442536}

#### **Tissue Location**

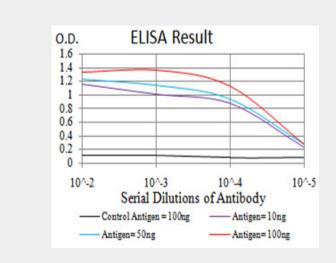
Abundantly and ubiquitously expressed.

## Mouse Monoclonal Antibody to SEC31A - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

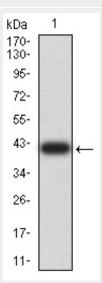
### Mouse Monoclonal Antibody to SEC31A - Images



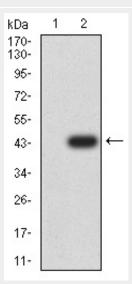
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red



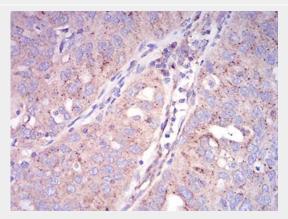
# line:Antigen (100 ng)



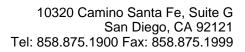
Western blot analysis using SEC31A mAb against human SEC31A (AA: 429-571) recombinant protein. (Expected MW is 41.8 kDa)



Western blot analysis using SEC31A mAb against HEK293 (1) and SEC31A (AA: 429-571)-hlgGFc transfected HEK293 (2) cell lysate.



Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using SEC31A mouse mAb with DAB staining.





Mouse Monoclonal Antibody to SEC31A - References

1.J Biol Chem. 2015 Feb 20;290(8):4981-93.; 2.Blood. 2011 Apr 14;117(15):4056-64.;