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Mouse Monoclonal Antibody to SEC31A

Purified Mouse Monoclonal Antibody
Catalog # AO2339a

Product Information

Application	WB, IHC, E
Primary Accession	O94979
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5D12C6
Isotype	Mouse IgG1
Calculated MW	133015
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;

Additional Information

Gene ID	22872
Other Names	ABP125; ABP130; HSPC275; HSPC334; SEC31L1
Dilution	WB~~1:1000 IHC~~1:100~500 E~~N/A
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.

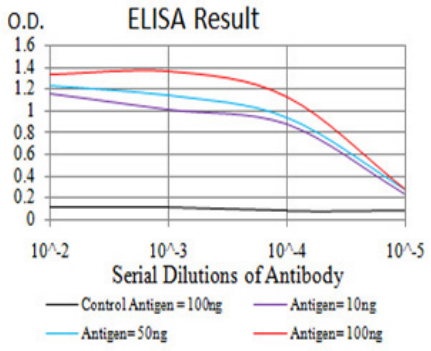
Protein Information

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:10788476). 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:17428803, PubMed:25201882, PubMed:28442536) {ECO:0000250|UniProtKB:Q9Z2Q1, ECO:0000269|PubMed:17428803, ECO:0000269|PubMed:25201882, ECO:0000269|PubMed:28442536}
Tissue Location	Abundantly and ubiquitously expressed.

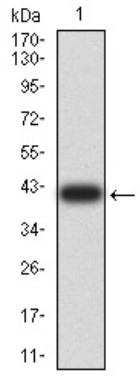
References

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

Images

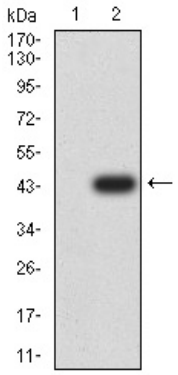


Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

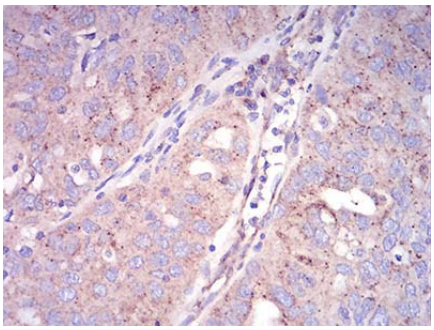


Western blot analysis using SEC31A mAb against human SEC31A (AA: 429-571) recombinant protein. (Expected MW is 41.8 kDa)

Western blot analysis using SEC31A mAb against HEK293 (1) and SEC31A (AA: 429-571)-hIgGFc transfected HEK293



(2) cell lysate.



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