10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

USO1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14035b

Product Information

Application	WB, IHC-P, E
Primary Accession	O60763
Other Accession	NP_003706.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34073
Calculated MW	107895
Antigen Region	932-960

Additional Information

Gene ID	8615
Other Names	General vesicular transport factor p115, Protein USO1 homolog, Transcytosis-associated protein, TAP, Vesicle-docking protein, USO1, VDP
Target/Specificity	This USO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 932-960 amino acids from the C-terminal region of human USO1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	USO1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	USO1
Synonyms	VDP
Function	General vesicular transport factor required for intercisternal transport in

	the Golgi stack; it is required for transcytotic fusion and/or subsequent binding of the vesicles to the target membrane. May well act as a vesicular anchor by interacting with the target membrane and holding the vesicular and target membranes in proximity.
Cellular Location	Cytoplasm, cytosol. Golgi apparatus membrane; Peripheral membrane protein. Note=Recycles between the cytosol and the Golgi apparatus during interphase. During interphase, the phosphorylated form is found exclusively in cytosol; the unphosphorylated form is associated with Golgi apparatus membranes

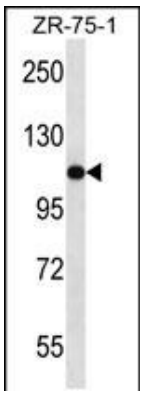
Background

The protein encoded by this gene is a peripheral membrane protein which recycles between the cytosol and the Golgi apparatus during interphase. It is regulated by phosphorylation: dephosphorylated protein associates with the Golgi membrane and dissociates from the membrane upon phosphorylation. Ras-associated protein 1 recruits this protein to coat protein complex II (COPII) vesicles during budding from the endoplasmic reticulum, where it interacts with a set of COPII vesicle-associated SNAREs to form a cis-SNARE complex that promotes targeting to the Golgi apparatus. Transport from the ER to the cis/medial Golgi compartments requires the action of this gene product, GM130 and giantin in a sequential manner.

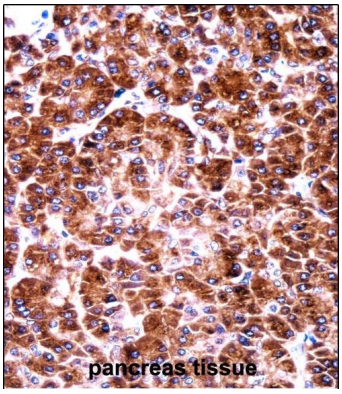
References

Striegl, H., et al. PLoS ONE 5 (2), E8991 (2010) :
Merk, M., et al. J. Immunol. 182(11):6896-6906(2009)
Mukherjee, S., et al. J. Biol. Chem. 284(3):1709-1717(2009)
Striegl, H., et al. PLoS ONE 4 (2), E4656 (2009) :
Guo, Y., et al. Mol. Biol. Cell 19(7):2830-2843(2008)

Images



USO1 Antibody (C-term) (Cat. #AP14035b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the USO1 antibody detected the USO1 protein (arrow).



USO1 Antibody (C-term) (AP14035b)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of USO1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Lentivirus-mediated silencing of USO1 inhibits cell proliferation and migration of human colon cancer cells.