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SURF4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18750b

Product Information

Application	WB, E
Primary Accession	O15260
Other Accession	Q64310, A7YY49, NP_149351.1
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38624
Calculated MW	30394
Antigen Region	211-237

Additional Information

Gene ID	6836
Other Names	Surfeit locus protein 4, SURF4, SURF-4
Target/Specificity	This SURF4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 211-237 amino acids from the C-terminal region of human SURF4.
Dilution	WB~~1:1000 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	SURF4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SURF4 {ECO:0000303|PubMed:18287528, ECO:0000312|HGNC:HGNC:11476}
Function	Endoplasmic reticulum cargo receptor that mediates the export of lipoproteins by recruiting cargos into COPII vesicles to facilitate their

secretion (PubMed:29643117, PubMed:30251625, PubMed:33186557). Acts as a cargo receptor for lipoproteins bearing both APOB and APOA1, thereby regulating lipoprotein delivery and the maintenance of lipid homeostasis (PubMed:29643117, PubMed:33186557). Synergizes with the GTPase SAR1B to mediate transport of circulating lipoproteins (PubMed:33186557). Promotes the secretion of PCSK9 (PubMed:30251625). Also mediates the efficient secretion of erythropoietin (EPO) (PubMed:32989016). May also play a role in the maintenance of the architecture of the endoplasmic reticulum-Golgi intermediate compartment and of the Golgi (PubMed:18287528).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Endoplasmic reticulum-Golgi intermediate compartment membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Note=Active at endoplasmic reticulum exit sites (ERES) where it is incorporated together with its lipoprotein cargos into COPII-coated vesicles. From the Golgi it is recycled back to the endoplasmic reticulum.

Background

This gene is located in the surfeit gene cluster, which is comprised of very tightly linked housekeeping genes that do not share sequence similarity. The encoded protein is a conserved integral membrane protein containing multiple putative transmembrane regions. In eukaryotic cells, protein transport between the endoplasmic reticulum and Golgi compartments is mediated in part by non-clathrin-coated vesicular coat proteins (COPs). The specific function of this protein has not been determined but its yeast homolog is directly required for packaging glycosylated pro-alpha-factor into COPII vesicles. This gene uses multiple polyadenylation sites, resulting in transcript length variation. The existence of alternatively spliced transcript variants has been suggested, but their validity has not been determined.

References

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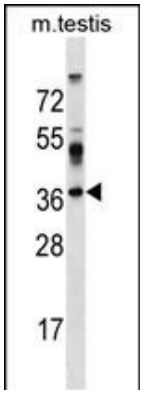
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Mitrovic, S., et al. Mol. Biol. Cell 19(5):1976-1990(2008)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images



SURF4 Antibody (C-term)(Cat. #AP18750b) western blot analysis in mouse testis tissue lysates (35ug/lane).This demonstrates the SURF4 antibody detected the SURF4 protein (arrow).