

AUP1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16554b

Specification

AUP1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB,E <u>Q9Y679</u> <u>NP_853553.1</u> Human Rabbit Polyclonal Rabbit IgG 440-468

AUP1 Antibody (C-term) - Additional Information

Gene ID 550

Other Names Ancient ubiquitous protein 1, AUP1

Target/Specificity

This AUP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 440-468 amino acids from the C-terminal region of human AUP1.

Dilution WB~~1:1000

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

AUP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

AUP1 Antibody (C-term) - Protein Information

Name AUP1 (<u>HGNC:891</u>)

Function Plays a role in the translocation of terminally misfolded proteins from the endoplasmic reticulum lumen to the cytoplasm and their degradation by the proteasome (PubMed:<u>18711132</u>, PubMed:<u>21857022</u>). Plays a role in lipid droplet formation (PubMed:<u>21857022</u>). Induces lipid



droplet clustering (PubMed:24039768). Recruits ubiquitin- conjugating enzyme UBE2G2 to lipid droplets which facilitates its interaction with ubiquitin ligases AMFR/gp78 and RNF139/TRC8, leading to sterol-induced ubiquitination of HMGCR and its subsequent proteasomal degradation (PubMed:23223569, PubMed:21127063). Also required for the degradation of INSIG1, SREBF1 and SREBF2 (PubMed:23223569). Plays a role in regulating assembly and secretion of very low density lipoprotein particles and stability of apolipoprotein APOB (PubMed:28183703).

Cellular Location

Endoplasmic reticulum membrane; Peripheral membrane protein. Lipid droplet

Tissue Location

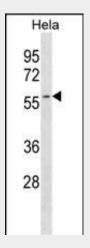
Detected in blood platelets and leukocytes (at protein level). Ubiquitous. Highly expressed in placenta, liver, kidney, skeletal muscle, heart and brain

AUP1 Antibody (C-term) - Protocols

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

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

AUP1 Antibody (C-term) - Images



AUP1 Antibody (C-term) (Cat. #AP16554b) western blot analysis in Hela cell line lysates (35ug/lane). This demonstrates the AUP1 antibody detected the AUP1 protein (arrow).

AUP1 Antibody (C-term) - Background

This gene encodes a protein that contains a domain with homology to the ancient conserved region of the archain 1 gene and a domain that may be involved in binding ubiquitin-conjugating enzymes. The protein encoded by this gene has been shown to bind to the conserved membrane-proximal sequence of the cytoplasmic tail of integrin alpha(IIb) subunits. These subunits play a crucial role in



the integrin alpha(IIb)beta(3) inside-out signalling in platelets and megakaryocytes that leads to platelet aggregation and thrombus formation. This gene overlaps the gene for mitochondrial serine protease 25.

AUP1 Antibody (C-term) - References

Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Kato, A., et al. J. Biol. Chem. 277(32):28934-28941(2002) Karpisheva, K.V., et al. Tsitologiia 44(9):846-851(2002) Karpisheva, K.V., et al. Tsitologiia 44(9):839-845(2002) Jang, W., et al. Genomics 36(2):366-368(1996)