

AGBL4 Polyclonal Antibody

Catalog # AP68324

Product Information

Application	WB, E
Primary Accession	Q5VU57
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58230

Additional Information

Gene ID	84871
Other Names	AGBL4; CCP6; Cytosolic carboxypeptidase 6; ATP/GTP-binding protein-like 4
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

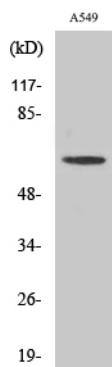
Name	AGBL4 (HGNC:25892)
Synonyms	CCP6
Function	Metalloprotease that mediates protein deglutamylation of tubulin and non-tubulin target proteins. Catalyzes the removal of polyglutamate side chains present on the gamma-carboxyl group of glutamate residues within the C-terminal tail of tubulin protein. Specifically cleaves tubulin long-side-chains, while it is not able to remove the branching point glutamate. Also catalyzes the removal of polyglutamate residues from the carboxy-terminus of non-tubulin proteins such as MYLK. Mediates the deglutamylation of nucleotidyltransferase CGAS, leading to CGAS antiviral defense response activation (By similarity). Involved in KLF4 deglutamylation which promotes KLF4 proteasome-mediated degradation, thereby negatively regulating cell pluripotency maintenance and embryogenesis (PubMed:29593216).
Cellular Location	Cytoplasm, cytosol {ECO:0000250 UniProtKB:Q09LZ8}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole Golgi apparatus. Cytoplasm, cytoskeleton, cilium basal body. Note=Colocalizes with

gamma-tubulin in the centrioles at interphase and dividing cells and with glutamylated tubulin in basal bodies of ciliated cells

Background

Metalloprotease that mediates deglutamylation of target proteins. Catalyzes the deglutamylation of polyglutamate side chains generated by post-translational polyglutamylation in proteins such as tubulins. Also removes polyglutamates from the carboxy-terminus of target proteins such as MYLK. Mediates deglutamylation of CGAS, regulating the antiviral activity of CGAS. Acts as a long-chain deglutamylase and specifically shortens long polyglutamate chains, while it is not able to remove the branching point glutamate, a process catalyzed by AGBL5/CCP5.

Images



Western Blot analysis of various cells using AGBL4 Polyclonal Antibody

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