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

AGTPBP1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17555a

Product Information

Application	WB, E
Primary Accession	Q9UPW5
Other Accession	NP_056054.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36613
Calculated MW	138448
Antigen Region	363-392

Additional Information

Gene ID	23287
Other Names	Cytosolic carboxypeptidase 1, 3417-, ATP/GTP-binding protein 1, Nervous system nuclear protein induced by axotomy protein 1 homolog, AGTPBP1, CCP1, KIAA1035, NNA1
Target/Specificity	This AGTPBP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 363-392 amino acids from the N-terminal region of human AGTPBP1.
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	AGTPBP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AGTPBP1 (HGNC:17258)
Function	Metallocarboxypeptidase that mediates protein deglutamylation of tubulin

	and non-tubulin target proteins (PubMed:22170066, PubMed:24022482, PubMed:30420557). Catalyzes the removal of polyglutamate side chains present on the gamma-carboxyl group of glutamate residues within the C-terminal tail of alpha- and beta- tubulin (PubMed:22170066, PubMed:24022482, PubMed:30420557). Specifically cleaves tubulin long-side-chains, while it is not able to remove the branching point glutamate (PubMed:24022482). Also catalyzes the removal of polyglutamate residues from the carboxy-terminus of alpha-tubulin as well as non-tubulin proteins such as MYLK (PubMed:22170066). Involved in KLF4 deglutamylation which promotes KLF4 proteasome-mediated degradation, thereby negatively regulating cell pluripotency maintenance and embryogenesis (PubMed:29593216).
Cellular Location	Cytoplasm. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q641K1}. Nucleus Mitochondrion {ECO:0000250|UniProtKB:Q641K1}. Note=Localizes in both the cytoplasm and nuclei of interphase and dividing cells

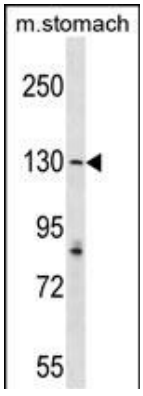
Background

NNA1 is a zinc carboxypeptidase that contains nuclear localization signals and an ATP/GTP-binding motif that was initially cloned from regenerating spinal cord neurons of the mouse.

References

Lim, J., et al. Cell 125(4):801-814(2006)
Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)
Fernandez-Gonzalez, A., et al. Science 295(5561):1904-1906(2002)
Harris, A., et al. Mol. Cell. Neurosci. 16(5):578-596(2000)

Images



AGTPBP1 Antibody (N-term) (Cat. #AP17555a) western blot analysis in mouse stomach tissue lysates (35ug/lane).This demonstrates the AGTPBP1 antibody detected the AGTPBP1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.