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

NTAN1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17739b

Product Information

Application	WB, E
Primary Accession	Q96AB6
Other Accession	NP_775745.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37947
Calculated MW	34677
Antigen Region	203-230

Additional Information

Gene ID	123803
Other Names	Protein N-terminal asparagine amidohydrolase, 351-, Protein NH2-terminal asparagine amidohydrolase, PNAA, Protein NH2-terminal asparagine deamidase, PNAD, Protein N-terminal Asn amidase, Protein N-terminal asparagine amidase, Protein NTN-amidase, NTAN1
Target/Specificity	This NTAN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 203-230 amino acids from the C-terminal region of human NTAN1.
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	NTAN1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NTAN1
Function	N-terminal asparagine deamidase that mediates deamidation of N-terminal

asparagine residues to aspartate. Required for the ubiquitin-dependent turnover of intracellular proteins that initiate with Met-Asn. These proteins are acetylated on the retained initiator methionine and can subsequently be modified by the removal of N-acetyl methionine by acylaminoacid hydrolase (AAH). Conversion of the resulting N-terminal asparagine to aspartate by NTAN1/PNAD renders the protein susceptible to arginylation, polyubiquitination and degradation as specified by the N-end rule. This enzyme does not act on substrates with internal or C-terminal asparagines and does not act on glutamine residues in any position, nor on acetylated N-terminal peptidyl Asn.

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q28955}.

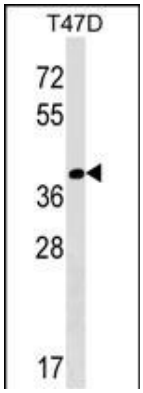
Background

Side-chain deamidation of N-terminal asparagine residues to aspartate. Required for the ubiquitin-dependent turnover of intracellular proteins that initiate with Met-Asn. These proteins are acetylated on the retained initiator methionine and can subsequently be modified by the removal of N-acetyl methionine by acylaminoacid hydrolase (AAH). Conversion of the resulting N-terminal asparagine to aspartate by PNAD renders the protein susceptible to arginylation, polyubiquitination and degradation as specified by the N-end rule. This enzyme does not act on substrates with internal or C-terminal asparagines and does not act on glutamine residues in any position (By similarity).

References

Okada, Y., et al. Hum. Mol. Genet. 19(11):2303-2312(2010)
Kamdem, L.K., et al. Pharmacogenet. Genomics 18(6):507-514(2008)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Grigoryev, S., et al. J. Biol. Chem. 271(45):28521-28532(1996)

Images



NTAN1 Antibody (C-term) (Cat. #AP17739b) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the NTAN1 antibody detected the NTAN1 protein (arrow).