

RNF146 Rabbit pAb

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Catalog # AP54590

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9NTX7
Predicted	Rat, Pig, Dog, Human, Mouse, Chicken, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38950
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RNF146
Epitope Specificity	95-160/359
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytosol. Nucleus. Note=Translocates to the nucleus after DNA damage, such as laser-induced DNA breaks, and concentrates at DNA breaks. This translocation requires PARP1 activation and PAR-binding.
DISEASE	Note=Defects in RNF146 are a cause of susceptibility to breast cancer.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. RNF146 (RING finger protein 146), also known as Dactylidin, is a 359 amino acid protein that contains one RING-type zinc finger and one WWE domain. Via its RING-type zinc finger, RNF146 may play a role in transcriptional regulation and protein degradation events. Defects in the gene encoding RNF146 are associated with Alzheimer's disease (AD) and may lead to a higher risk of breast cancer. Two isoforms of RNF146 exist due to alternative splicing events.

Additional Information

Gene ID	81847
Other Names	E3 ubiquitin-protein ligase RNF146, 2.3.2.27, Dactylidin, Iduna, RING finger protein 146, RING-type E3 ubiquitin transferase RNF146, RNF146
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	RNF146
Function	E3 ubiquitin-protein ligase that specifically binds poly-ADP- ribosylated (PARsylated) proteins and mediates their ubiquitination and subsequent degradation (PubMed:21478859, PubMed:21799911, PubMed:22267412). May regulate many important biological processes, such as cell survival and DNA damage response (PubMed:21825151, PubMed:22267412). Acts as an activator of the Wnt signaling pathway by mediating the ubiquitination of PARsylated AXIN1 and AXIN2, 2 key components of the beta-catenin destruction complex (PubMed:21478859, PubMed:21799911). Acts in cooperation with tankyrase proteins (TNKS and TNKS2), which mediate PARsylation of target proteins AXIN1, AXIN2, BLZF1, CASC3, TNKS and TNKS2 (PubMed:21799911). Recognizes and binds tankyrase-dependent PARsylated proteins via its WWE domain and mediates their ubiquitination, leading to their degradation (PubMed:21799911). Different ubiquitin linkage types have been observed: TNKS2 undergoes ubiquitination at 'Lys-48' and 'Lys-63', while AXIN1 is only ubiquitinated at 'Lys-48' (PubMed:21799911). May regulate TNKS and TNKS2 subcellular location, preventing aggregation at a centrosomal location (PubMed:21799911). Neuroprotective protein (PubMed:21602803). Protects the brain against N-methyl-D-aspartate (NMDA) receptor- mediated glutamate excitotoxicity and ischemia, by interfering with PAR-induced cell death, called parthanatos (By similarity). Prevents nuclear translocation of AIFM1 in a PAR-binding dependent manner (By similarity). Does not affect PARP1 activation (By similarity). Protects against cell death induced by DNA damaging agents, such as N-methyl-N-nitro-N-nitrosoguanidine (MNNG) and rescues cells from G1 arrest (By similarity). Promotes cell survival after gamma-irradiation (PubMed:21825151). Facilitates DNA repair (PubMed:21825151).
Cellular Location	Cytoplasm, cytosol. Nucleus. Note=Translocates to the nucleus after DNA damage, such as laser-induced DNA breaks, and concentrates at DNA breaks. This translocation requires PARP1 activation and PAR-binding
Tissue Location	Ubiquitously expressed. Up-regulated in brains from patients with Alzheimer disease

Background

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