

RNF144B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18585c

Specification

RNF144B Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>07Z419</u>
Other Accession	<u>NP_877434.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33697
Antigen Region	90-118

RNF144B Antibody (Center) - Additional Information

Gene ID 255488

Other Names

E3 ubiquitin-protein ligase RNF144B, 632-, IBR domain-containing protein 2, RING finger protein 144B, p53-inducible RING finger protein, RNF144B, IBRDC2, P53RFP

Target/Specificity

This RNF144B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 90-118 amino acids from the Central region of human RNF144B.

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

RNF144B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

RNF144B Antibody (Center) - Protein Information

Name RNF144B



Synonyms IBRDC2, P53RFP

Function E3 ubiquitin-protein ligase which accepts ubiquitin from E2 ubiquitin-conjugating enzymes UBE2L3 and UBE2L6 in the form of a thioester and then directly transfers the ubiquitin to targeted substrates such as LCMT2, thereby promoting their degradation. Induces apoptosis via a p53/TP53-dependent but caspase-independent mechanism. Plays a crucial role in maintaining the genomic stability by controlling the degradation of multiple proteins involved in mitotic progression and DNA damage (PubMed:<u>38685100</u>). Regulates epithelial homeostasis by mediating degradation of CDKN1A and isoform 2 of TP63 (PubMed:<u>23128396</u>). Plays a regulatory role in innate immunity by negatively regulating IRF3 activation and IFN-beta production. Mechanistically, inhibits TBK1 phosphorylation and 'Lys-63'-linked polyubiquitination independently of its E3 ligase activity (PubMed:<u>31509299</u>). Alternatively, promotes 'Lys-27' and 'Lys-33'-linked ubiquitination of IFIH1/MDA5, promoting selective autophagic degradation of IFIH1/MDA5 to inhibit antiviral response (PubMed:<u>39285245</u>).

Cellular Location

Mitochondrion membrane; Single-pass membrane protein. Cytoplasm. Note=Mostly cytosololic, accumulates in submitochondrial domains specifically upon apoptosis induction, in synchrony with BAX activation

Tissue Location

Broadly expressed, with lowest levels in brain and thymus, and highest levels detectable in heart, ovary and testis

RNF144B Antibody (Center) - Protocols

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

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

RNF144B Antibody (Center) - Images



RNF144B Antibody (Center) (Cat. #AP18585c) western blot analysis in ZR-75-1 cell line lysates



(35ug/lane). This demonstrates the RNF144B antibody detected the RNF144B protein (arrow).

RNF144B Antibody (Center) - Background

E3 ubiquitin-protein ligase which accepts ubiquitin from E2 ubiquitin-conjugating enzymes UBE2L3 and UBE2L6 in the form of a thioester and then directly transfers the ubiquitin to targeted substrates such as LCMT2, thereby promoting their degradation. Induces apoptosis via a TP53/p53-dependent but caspase-independent mechanism. However, its overexpression also produces a decrease of the ubiquitin-dependent stability of BAX, a pro-apoptotic protein, ultimately leading to protection of cell death; But, it is not an anti-apoptotic protein per se.

RNF144B Antibody (Center) - References

Sayan, B.S., et al. Proc. Natl. Acad. Sci. U.S.A. 107(29):12877-12882(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Benard, G., et al. EMBO J. 29(8):1458-1471(2010) Markson, G., et al. Genome Res. 19(10):1905-1911(2009) van Wijk, S.J., et al. Mol. Syst. Biol. 5, 295 (2009) :