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IBRDC2 Rabbit pAb

Catalog # AP99754

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q7Z419
Other Accession	Q7Z419
Predicted	Rat, Pig, Cat, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33697
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IBRDC2/RING finger protein 144B
Epitope Specificity	218-303/303
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the RBR family. RNF144 subfamily. Contains 1 IBR-type zinc finger. Contains 2 RING-type zinc fingers.
SUBUNIT	Interacts with UBE2L3, UBE2L6 and LCMT2, as well as with BAX.
Post-translational modifications	Auto-ubiquitinated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. 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. Tissue specificity: Broadly expressed, with lowest levels in brain and thymus, and highest levels detectable in heart, ovary and testis.

Additional Information

Gene ID	255488
Other Names	IBRDC2; PIR2; bA528A10.3; p53RFP; E130105P19Rik; R144B_HUMAN; RNF144B; IBR domain-containing protein 2; RING finger protein 144B; p53-inducible RING finger protein; 2.3.2.31; R144B_MOUSE; IBR domain containing 2
Dilution	IHC-P=1:100-500,IHC-F=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	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:38685100). Regulates epithelial homeostasis by mediating degradation of CDKN1A and isoform 2 of TP63 (PubMed:23128396). 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:31509299). Alternatively, promotes 'Lys-27' and 'Lys-33'-linked ubiquitination of IFIH1/MDA5, promoting selective autophagic degradation of IFIH1/MDA5 to inhibit antiviral response (PubMed:39285245).
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

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