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

Anti-RNF144B Antibody

Catalog # AP60952

Product Information

Application	WB, IHC
Primary Accession	Q7Z419
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33697

Additional Information

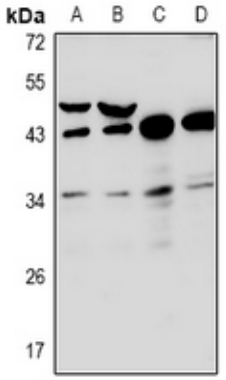
Gene ID	255488
Other Names	IBRDC2; P53RFP; E3 ubiquitin-protein ligase RNF144B; IBR domain-containing protein 2; RING finger protein 144B; p53-inducible RING finger protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RNF144B. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

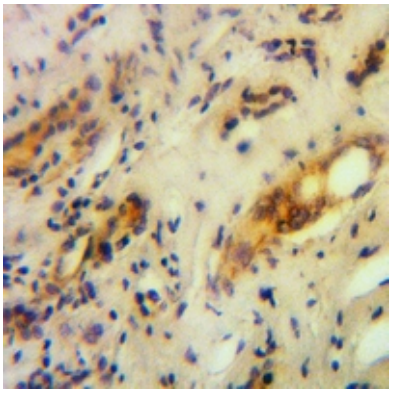
Name	RNF144B
Synonyms	IBRDC2, P53RFP
Function	E3 ubiquitin-protein ligase which accepts ubiquitin from E2 ubiquitin-conjugating enzymes UBE2L3 and UBE2L6 in the form of a thioester and then directly transfers the ubiquitin to targeted substrates such as LCMT2, thereby promoting their degradation. Induces 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

Images



Western blot analysis of RNF144B expression in H1792 (A), A549 (B), CT26 (C), PC12 (D) whole cell lysates. (Predicted band size: 33 kD; Observed band size: 34; 43 kD)



Immunohistochemical analysis of RNF144B staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.