

p53RFP Polyclonal Antibody

Catalog # AP71727

Specification

p53RFP Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB <u>07Z419</u> Human, Mouse Rabbit Polyclonal

p53RFP Polyclonal Antibody - Additional Information

Gene ID 255488

Other Names RNF144B; IBRDC2; P53RFP; E3 ubiquitin-protein ligase RNF144B; IBR domain-containing protein 2; RING finger protein 144B; p53-inducible RING finger protein

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

p53RFP Polyclonal Antibody - 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

p53RFP Polyclonal Antibody - Protocols

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

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

p53RFP Polyclonal Antibody - Images

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p53RFP Polyclonal Antibody - 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 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.