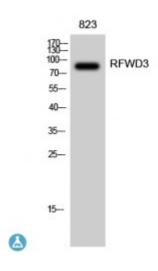


Anti-RFWD3 antibody



Description Rabbit polyclonal to RFWD3.

Model STJ95429

Host Rabbit

Reactivity Human

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human RFWD3

Immunogen Region 350-430 aa, Internal

Gene ID <u>55159</u>

Gene Symbol RFWD3

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000

Specificity RFWD3 Polyclonal Antibody detects endogenous levels of RFWD3 protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name E3 ubiquitin-protein ligase RFWD3 RING finger and WD repeat domain-

containing protein 3 RING finger protein 201

Molecular Weight 85 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:25539OMIM:614151</u>

Alternative Names E3 ubiquitin-protein ligase RFWD3 RING finger and WD repeat domain-

containing protein 3 RING finger protein 201

Function E3 ubiquitin-protein ligase that mediates the ubiquitination of p53/TP53 in the

late response to DNA damage, and acts as a positive regulator of p53/TP53 stability, thereby regulating the G1/S DNA damage checkpoint. May act by catalyzing the formation of short polyubiquitin chains on p53/TP53 that are not targeted to the proteasome. In response to ionizing radiation, interacts with MDM2 and enhances p53/TP53 ubiquitination, possibly by restricting MDM2 from extending polyubiquitin chains on ubiquitinated p53/TP53. Plays a role

in RPA-mediated DNA damage signaling and repair.

Sequence and Domain Family The coiled coil domain may be involved in RPA2-binding.

Cellular Localization Nucleus. Nucleus, PML body. Cytoplasm. In undamaged cells, found both in

the cytoplasm and in the nucleus, partially associated with PML nuclear bodies. In response to replication block, such as that caused by hydroxyurea treatment, or to DNA damage caused by ionizing radiations or doxorubicin, recruited to the nucleus, to stalled replication forks or to sites of DNA repair.

This recruitment depends upon RPA2.

Post-translational Phosphorylated at Ser-46 and Ser-63 upon DNA damage by ATM or ATR. **Modifications** ATM phosphorylation occurs at early times upon DNA damage, while ATR

ATM phosphorylation occurs at early times upon DNA damage, while ATR is the major kinase at later times. Phosphorylation by ATM and ATR is required to stabilize p52/TP52. Part of the phosphorylation depends upon PPA2.

to stabilize p53/TP53. Part of the phosphorylation depends upon RPA2

presence.

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