

Anti-RNF138 antibody



Description Rabbit polyclonal to RNF138.

Model STJ95520

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

ImmunogenSynthesized peptide derived from human RNF138

Immunogen Region 1-80 aa, Internal

Gene ID <u>51444</u>

Gene Symbol RNF138

Dilution range WB 1:500-1:2000ELISA 1:20000

Specificity RNF138 Polyclonal Antibody detects endogenous levels of RNF138 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 RNF138 Nemo-like kinase-associated RING finger

protein NLK-associated RING finger protein hNARF RING finger protein

138 RING-type E3 ubiquitin transferase RNF138

Molecular Weight 28 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:17765OMIM:616319</u>

Alternative Names E3 ubiquitin-protein ligase RNF138 Nemo-like kinase-associated RING finger

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138 RING-type E3 ubiquitin transferase RNF138

Function E3 ubiquitin-protein ligase involved in DNA damage response by promoting

DNA resection and homologous recombination . Recruited to sites of double-strand breaks following DNA damage and specifically promotes double-strand break repair via homologous recombination . Two different, non-exclusive, mechanisms have been proposed. According to a report, regulates the choice of double-strand break repair by favoring homologous recombination over non-homologous end joining (NHEJ): acts by mediating ubiquitination of XRCC5/Ku80, leading to remove the Ku complex from DNA breaks, thereby

promoting homologous recombination. According to another report,

cooperates with UBE2Ds E2 ubiquitin ligases (UBE2D1, UBE2D2, UBE2D3

or UBE2D4) to promote homologous recombination by mediating ubiquitination of RBBP8/CtIP . Together with NLK, involved in the

ubiquitination and degradation of TCF/LEF . Also exhibits auto-ubiquitination activity in combination with UBE2K . May act as a negative regulator in the

Wnt/beta-catenin-mediated signaling pathway.

Sequence and Domain Family The zinc finger domains (C2H2-type and C2HC-type zinc fingers) bind DNA

and mediate recruitment to double-strand break sites. They show strong preference for DNA with 5'- or 3'-single-stranded overhangs, while they do not bind blunt-ended double-stranded DNA or poly(ADP-ribose) (PAR)

polymers.

Cellular Localization Chromosome. Recruited at DNA damage sites. Localizes to sites of double-

strand break: localization to double-strand break sites is mediated by the zinc

fingers.

Post-translational

Modifications

Auto-ubiquitinated.

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com