

SNM1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54923

Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession

Reactivity
Rat

Host
Clonality
Polyclonal
Calculated MW
Physical State

Q6PJP8
Rat
Polyclonal
116400
Liquid

Immunogen KLH conjugated synthetic peptide derived from human SNM1

Epitope Specificity 851-950/1040

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nuclear

SIMILARITY Belongs to the DNA repair metallo-beta-lactamase (DRMBL) family.

SUBUNIT Binds constitutively to TP53BP1. Binds CDC27, which is itself a component of

the anaphase promoting complex (APC). Binds PIAS1.

DISEASE In some cells it may be found in typically 1 or 2 discrete nuclear aggregates of

unknown function which also contain TP53BP1. Also found in multiple discrete nuclear foci which increase in number following treatment with ionizing radiation or interstrand cross-linking agents. These foci overlap with those formed by the MRN complex (composed of MRE11A, RAD50 and NBN)

and BRCA1.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions This gene encodes a conserved protein that is involved in the repair of DNA

interstrand cross-links. DNA cross-links suppress transcription, replication, and DNA segregation. The encoded protein is a regulator of the mitotic cell cycle checkpoint. Alternative splicing results in multiple transcript variants.

[provided by RefSeq, Nov 2012]

Additional Information

Gene ID 9937

Other Names DNA cross-link repair 1A protein, SNM1 homolog A, hSNM1, hSNM1A,

DCLRE1A, KIAA0086, SNM1, SNM1A

Target/Specificity Expressed in brain, heart, kidney, liver, pancreas, placenta and skeletal

muscle.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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 DCLRE1A

Synonyms KIAA0086, SNM1, SNM1A

Function May be required for DNA interstrand cross-link repair. Also required for

checkpoint mediated cell cycle arrest in early prophase in response to mitotic spindle poisons. Possesses beta-lactamase activity, catalyzing the hydrolysis of penicillin G and nitrocefin (PubMed:31434986). Exhibits no activity towards other beta-lactam antibiotic classes including cephalosporins (cefotaxime)

and carbapenems (imipenem) (PubMed:31434986).

Cellular Location Nucleus. Note=In some cells it may be found in typically 1 or 2 discrete

nuclear aggregates of unknown function which also contain TP53BP1. Also found in multiple discrete nuclear foci which increase in number following treatment with ionizing radiation or interstrand cross-linking agents. These foci overlap with those formed by the MRN complex (composed of MRE11,

RAD50 and NBN) and BRCA1

Tissue Location Expressed in brain, heart, kidney, liver, pancreas, placenta and skeletal

muscle.

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