

ZRANB3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56249

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q5FWF4
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	123248

Additional Information

Gene ID	84083
Other Names	DNA annealing helicase and endonuclease ZRANB3, Annealing helicase 2, AH2, Zinc finger Ran-binding domain-containing protein 3, DNA annealing helicase ZRANB3, 3.6.4.-, Endonuclease ZRANB3, 3.1.-., ZRANB3 {ECO:0000303 PubMed:22759634, ECO:0000312 HGNC:HGNC:25249}
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	ZRANB3 {ECO:0000303 PubMed:22759634, ECO:0000312 HGNC:HGNC:25249}
Function	DNA annealing helicase and endonuclease required to maintain genome stability at stalled or collapsed replication forks by facilitating fork restart and limiting inappropriate recombination that could occur during template switching events (PubMed: 21078962 , PubMed: 22704558 , PubMed: 22705370 , PubMed: 22759634 , PubMed: 26884333). Recruited to the sites of stalled DNA replication by polyubiquitinated PCNA and acts as a structure-specific endonuclease that cleaves the replication fork D-loop intermediate, generating an accessible 3'-OH group in the template of the leading strand, which is amenable to extension by DNA polymerase (PubMed: 22759634 , PubMed: 28621305). In addition to endonuclease activity, also catalyzes the fork regression via annealing helicase activity in order to prevent disintegration of the replication fork and the formation of double-strand breaks (PubMed: 22704558 , PubMed: 22705370).

Cellular Location

Nucleus. Chromosome. Note=Following DNA damage, recruited to sites of DNA damage and stalled replication forks by polyubiquitinated PCNA (PubMed:22704558, PubMed:22705370, PubMed:22759634)

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