10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SMARCAD1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57714

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9H4L7
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	117402

Additional Information

Gene ID	56916
Other Names	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A containing DEAD/H box 1, 3.6.4.12, ATP-dependent helicase 1, hHEL1, SMARCAD1, KIAA1122
Dilution	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	SMARCAD1 (HGNC:18398)
Function	Protein that possesses intrinsic ATP-dependent nucleosome- remodeling activity and is both required for DNA repair and heterochromatin organization (PubMed:22960744, PubMed:21820097). Combines the ATP-dependent ability to exchange histones, with the chaperone-like ATP-independent activity to deposit histones and assemble nucleosomes (PubMed:21820097). Promotes DNA end resection of double-strand breaks (DSBs) following DNA damage: probably acts by weakening histone DNA interactions in nucleosomes flanking DSBs (PubMed:22960744). Required for the restoration of heterochromatin organization after replication (PubMed:21549307). Acts at replication sites to facilitate the maintenance of heterochromatin by directing H3 and H4 histones deacetylation, H3 'Lys-9' trimethylation (H3K9me3) and restoration of silencing (PubMed:21549307).
Cellular Location	Nucleus. Chromosome. Note=Colocalizes with PCNA at replication forks during S phase (PubMed:21549307). Recruited to double-strand breaks (DSBs) sites of DNA damage (PubMed:22960744)

Tissue Location	Isoform 1 is expressed ubiquitously. Isoform 3 is expressed mainly in skin and esophagus. Expressed in fibroblasts and keratinocytes (at protein level) (PubMed:29409814)

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