Datasheet for ABIN7599248

anti-RAD51AP1 antibody (AA 1-303)

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Overview

Quantity:	100 µg
Target:	RAD51AP1
Binding Specificity:	AA 1-303
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAD51AP1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-RAD51AP1 Antibody Picoband®
Immunogen:	E.coli-derived human RAD51AP1 recombinant protein (Position: M1-K303).
Characteristics:	Anti-RAD51AP1 Antibody Picoband® (ABIN7599248). Tested in WB, IF, IHC, ICC, Flow Cytometry, ELISA applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	RAD51AP1
Alternative Name:	RAD51AP1 (RAD51AP1 Products)
Background:	The RAD51AP1 gene encodes a protein known as RAD51-associated protein 1, which plays a crucial role in homologous recombination, a DNA repair pathway essential for maintaining genomic integrity. RAD51AP1 interacts with RAD51, a key protein involved in homologous recombination, and promotes the assembly of RAD51 nucleoprotein filaments on single-stranded DNA, facilitating the search for homologous sequences and strand exchange. This process is vital for repairing DNA double-strand breaks and stalled replication forks, as well as for meiotic recombination and telomere maintenance. Dysregulation of RAD51AP1 expression or function has been implicated in cancer development and progression, as defects in homologous recombination can lead to genomic instability and oncogenesis. Understanding the molecular mechanisms underlying RAD51AP1-mediated homologous recombination is crucial for deciphering its role in DNA repair and genome maintenance, as well as for developing targeted therapies for cancer and other diseases associated with DNA damage.
Molecular Weight:	38 kDa
Gene ID:	10635
UniProt:	Q96B01

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human Immunohistochemistry, 2-5 µg/mL, Human Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human ELISA, 0.1-0.5 µg/mL, - 1. Kovalenko, O. V., Golub, E. I., Bray-Ward, P., Ward, D. C., Radding, C. M. A novel nucleic acid-binding protein that interacts with human Rad51 recombinase. Nucleic Acids Res. 25: 4946-4953, 1997. 2. Mizuta, R., LaSalle, J. M., Cheng, H.-L., Shinohara, A., Ogawa, H., Copeland, N., Jenkins, N. A., Lalande, M., Alt, F. W. RAB22 and RAB163/mouse BRCA2: proteins that specifically interact with the RAD51 protein. Proc. Nat. Acad. Sci. 94: 6927-6932, 1997. 3. Modesti, M., Budzowska, M., Baldeyron, C., Demmers, J. A. A., Ghirlando, R., Kanaar, R. RAD51AP1 is a structure-specific DNA binding protein that stimulates joint molecule formation during RAD51-mediated homologous recombination. Molec. Cell 28: 468-481, 2007.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.