

# Product datasheet

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# ARG40943 anti-Rad51D antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Rad51D

Tested Reactivity Hu

Predict Reactivity Ms, Rat
Tested Application WB

Host Rabbit
Clonality Polyclonal

Isotype IgG

Target Name Rad51D Species Human

Immunogen Recombinant fusion protein corresponding to aa. 1-328 of Human Rad51D (NP\_002869.3).

Conjugation Un-conjugated

Alternate Names TRAD; DNA repair protein RAD51 homolog 4; RAD51L3; RAD51 homolog D; BROVCA4; R51H3;

RAD51-like protein 3

# **Application Instructions**

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat	
Observed Size	35 kDa	

# **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

RAD51D

Gene Full Name

RAD51 paralog D

Background

The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and Saccharomyces cerevisiae Rad51, which are known to be involved in the homologous recombination and repair of DNA. This protein forms a complex with several other members of the RAD51 family, including RAD51L1, RAD51L2, and XRCC2. The protein complex formed with this protein has been shown to catalyze homologous pairing between single- and double-stranded DNA, and is thought to play a role in the early stage of recombinational repair of DNA. Alternative splicing results in multiple transcript variants. Read-through transcription also exists between this gene and the downstream ring finger and FYVE-like domain containing 1 (RFFL) gene. [provided by RefSeq, Jan 2011]

Function

Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. Bind to single-stranded DNA (ssDNA) and has DNA-dependent ATPase activity. Part of the Rad21 paralog protein complex BCDX2 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, BCDX2 acts downstream of BRCA2 recruitment and upstream of RAD51 recruitment. BCDX2 binds predominantly to the intersection of the four duplex arms of the Holliday junction and to junction of replication forks. The BCDX2 complex was originally reported to bind single-stranded DNA, single-stranded gaps in duplex DNA and specifically to nicks in duplex DNA. Involved in telomere maintenance. The BCDX2 subcomplex XRCC2:RAD51D can stimulate Holliday junction resolution by BLM. [UniProt]

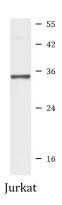
Calculated Mw

35 kDa

Cellular Localization

Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, telomere. [UniProt]

#### **Images**



#### ARG40943 anti-Rad51D antibody WB image

Western blot: 25  $\mu g$  of Jurkat cell lysate stained with ARG40943 anti-Rad51D antibody at 1:500 dilution.