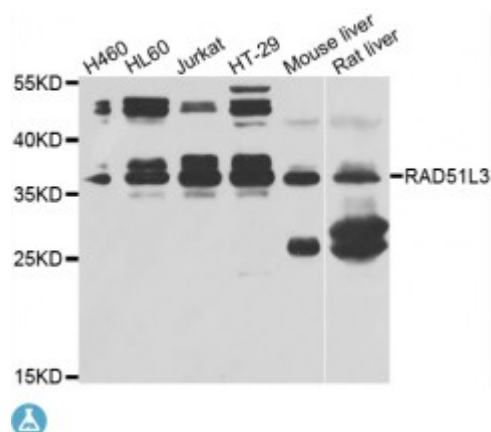


Anti-Rad51D Antibody



Description

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.

Model	STJ116229
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IF, WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-328 of human Rad51D (NP_002869.3).
Gene ID	5892
Gene Symbol	RAD51D
Dilution range	WB 1:500 - 1:2000 IF 1:50 - 1:200
Tissue Specificity	Expressed in colon, prostate, spleen, testis, ovary, thymus and small intestine, Weakly expressed in leukocytes

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	DNA repair protein RAD51 homolog 4 R51H3 RAD51 homolog D RAD51-like protein 3 TRAD
Molecular Weight	35.049 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:9823OMIM:602954Reactome:R-HSA-5685942
Alternative Names	DNA repair protein RAD51 homolog 4 R51H3 RAD51 homolog D RAD51-like protein 3 TRAD
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,
Cellular Localization	Nucleus, Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, Chromosome, telomere