



Rabbit Anti-RAD51C/TDRD1 antibody

SL2186R

Product Name:	RAD51C/TDRD1
Chinese Name:	乳腺癌和卵巢癌易感基因RAD51C抗体
Alias:	tudor domain containing 1; Tdrd1; MTR-1; MTR 1; FLJ21082; CT41.1; TDRD1_HUMAN. Cancer/testis antigen 41.1; TDRD 1; tdrd1; Tudor domain containing protein 1; Tudor domain-containing protein 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	132kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TDRD1:201-300/1382
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	Essential for the homologous recombination (HR) pathway of DNA repair. Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. The RAD51B-RAD51C dimer exhibits single-stranded DNA-dependent ATPase activity. The BCDX2 complex binds single-stranded DNA, single-stranded gaps in duplex DNA and

specifically to nicks in duplex DNA. Participates in branch migration and Holliday junction resolution and thus is important for processing HR intermediates late in the DNA repair process. Also has an early function in DNA repair in facilitating phosphorylation of the checkpoint kinase CHK2 and thereby transduction of the damage signal, leading to cell cycle arrest and HR activation. Protects RAD51 from ubiquitin-mediated degradation that is enhanced following DNA damage. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and XRCC3. Contributes to DNA cross-link resistance, sister chromatid cohesion and genomic stability. Involved in maintaining centrosome number in mitosis.

Function:

Plays a central role during spermatogenesis by participating in the repression of transposable elements and prevent their mobilization, which is essential for the germline integrity. Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and govern the methylation and subsequent repression of transposons. Required for the localization of Piwi proteins to the meiotic nuage. Involved in the piRNA metabolic process by ensuring the entry of correct transcripts into the normal piRNA pool and limiting the entry of cellular transcripts into the piRNA pathway. May act by allowing the recruitment of piRNA biogenesis or loading factors that ensure the correct entry of transcripts and piRNAs into Piwi proteins

Subunit:

Found in a mRNP complex, at least composed of TDRD1, TDRD6, TDRD7 and DDX4. Interacts with MAEL. Interacts with PIWIL1, PIWIL2 and PIWIL4 (when methylated on arginine residues)

Subcellular Location:

Cytoplasm. Note=Component of the meiotic nuage, also named P granule, a germ-cell-specific organelle required to repress transposon during meiosis. Also present in chromatoid body.

Tissue Specificity:

Expressed in a variety of tissues, with highest expression in testis, heart muscle, spleen and prostate.

Similarity:

Belongs to the TDRD1 family.
Contains 1 MYND-type zinc finger.
Contains 4 Tudor domains.

SWISS:

Q9BXT4

Gene ID:

56165

Database links:

[Entrez Gene: 56165](#)Human

[Oimim: 605796](#)Human

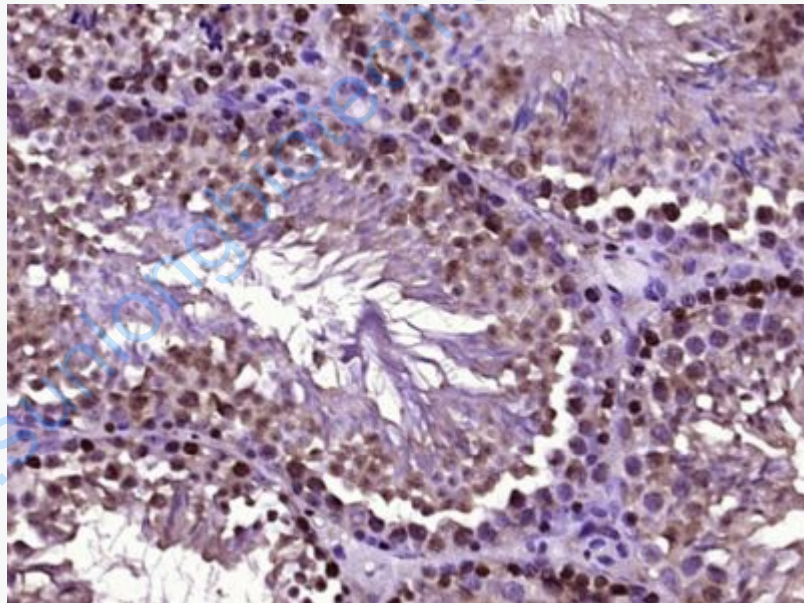
[SwissProt: Q9BXT4](#)Human

[Unigene: 333132](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RAD51C/TDRD1) Polyclonal Antibody, Unconjugated (SL2186R) at 1:400 overnight at 4°C, followed by operating

	according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.
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