

Product datasheet for TP505059

Rad51 (NM_011234) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse RAD51 recombinase (Rad51), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >MR205059 protein sequence
Red=Cloning site Green=Tags(s)

MAMQMQLASADTSVEEESFGPQPISRLEQCGINANDVKKLEEAGYHTVEAVAYAPKKELINIKGISEAK
ADKILTEAAKLVPMGFTTATEFHQRRSEIIQITGSKELDKLLQGGIETGSITEMFGEFRTGKTQICHTL
AVTCQLPIDRGGGEGKAMYIDTEGTRFRPERLLAVAERYGLSGSDVLDNVAYARGFNTDHQTQLLYQASAM
MVESRYALLIVDSATALYRTDYSRGELSARQMHLARFLRMLLRLADEFVAVVITNQVVAQVDGAAMFA
ADPKKPIGGNIIAHASTTRLYLRKGRGETRICKIYDSPCLPEAEAMFAINADGVGDAKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 37 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: [NP_035364](#)

Locus ID: 19361

UniProt ID: [Q08297](#)



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RefSeq Size:	2138
Cytogenetics:	2 59.92 cM
RefSeq ORF:	1020
Synonyms:	AV304093; Rad51a; Reca
Summary:	<p>Plays an important role in homologous strand exchange, a key step in DNA repair through homologous recombination (HR) (PubMed:15834424). Binds to single and double-stranded DNA and exhibits DNA-dependent ATPase activity. Catalyzes the recognition of homology and strand exchange between homologous DNA partners to form a joint molecule between a processed DNA break and the repair template. Binds to single-stranded DNA in an ATP-dependent manner to form nucleoprotein filaments which are essential for the homology search and strand exchange. Part of a PALB2-scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51C and XRCC3. Also involved in interstrand cross-link repair (By similarity). [UniProtKB/Swiss-Prot Function]</p>