

## Product datasheet for TP510443

### Rad54I (NM\_001122958) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse RAD54 like ( <i>S. cerevisiae</i> ) (Rad54I), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR210443 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	MRRSLAPSQLARRKPEDRSSDDEDWQPGTVTPKKRKSSETQVQECFLSPFRKPLTQLLNRPCLDSSQH EAFIRSILSKPFKVIPNYQGGLGSRALGLKRVGVRRALHDPLEEGALVLYEPPPLSAHDQLKLDKEKLP VHVVDPIILSKVLRPHQREGVKFLWECVTSRRIPGSHGCIMADEMGLGKTLQCITLMWTLLRQSPECKPE IEKAVVWSPSSLVKNWYNEVEKWLGGRIQPLAIDGGSKDEIDRKLEGFMNQRGARVPSILIISETFRL HVGVLKKGNVGLVICDEGHRLKNSNQTYQALDSLNTSRRVLISGTPIQNDLLEYFSLVHFVNSGILGTA HEFKKHFEPLILKSRDAAASEADRQRGEERLRELIGIVNRCLIRRTSDILSKYLPVKIEQVCCRLTPLQ TELYKRFLRQAKPEEELREGKMSVSSLSSITSLKLCNHPALIYDKCVAEEDGFEGTLGIFPPGYNSKAV EPQLSGKMLVLDYILAVTRSRSDDKVVLSNYQTLDLFEKLCRVRRLYVRLDGTMSIKKRAKVERFN SPSSPDFVFMSSKAGGCGLNLIGANRLVMFDPDWNPANDEQAMARVWRDGGQKKICYIRLLSAGTIEEK IFQRQSHKALSSCVDEEQDVERHFSLGELKELFTLDEASLSDTHDRLHCRRCVNNRQVWPPPDGSDCT SDLAQWNHSTDKRGLQDEVLQAAWDASSTAITFVHQRSHEEQRGLH
	<b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
Tag:	C-MYC/DDK
Predicted MW:	84.7 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.



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<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<u>NP_001116430</u>
<b>Locus ID:</b>	19366
<b>UniProt ID:</b>	<u>P70270</u>
<b>RefSeq Size:</b>	2763
<b>Cytogenetics:</b>	4 D1
<b>RefSeq ORF:</b>	2244
<b>Synonyms:</b>	RAD54
<b>Summary:</b>	<p>Involved in DNA repair and mitotic recombination. Functions in the recombinational DNA repair (RAD52) pathway. Dissociates RAD51 from nucleoprotein filaments formed on dsDNA. Could be involved in the turnover of RAD51 protein-dsDNA filaments (By similarity). Deficient mice also show significantly shorter telomeres than wild-type controls, indicating that the protein activity plays an essential role in telomere length maintenance in mammals. Deficiency also resulted in an increased frequency of end-to-end chromosome fusions involving telomeres compared to the controls, suggesting a putative role in telomere capping. Non-homologous end joining (NHEJ) and homologous recombination (HR) represent the two major pathways of DNA double-strand break (DSB) repair in eukaryotic cells. LIG4 and RAD54L cooperate to support cellular proliferation, repair spontaneous DSBs, and prevent chromosome and single chromatid aberrations.[UniProtKB/Swiss-Prot Function]</p>