

Recombinant Full Length Mouse Rad51 Protein, Myc/DDK-tagged

Cat. No. Rad51-5350M Lot. No. (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of mouse full-length RAD51 recombinase (Rad51), with C-terminal MYC/DDK tag, expressed in HEK293T cells.
Species	Mouse
Source	HEK293
Description	Plays an important role in homologous strand exchange, a key step in DNA repair through homologous recombination (HR). 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.
Molecular Mass	37 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 12 months from the date of receipt of the product under proper storage and

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handling conditions. Avoid repeated freeze-thaw cycles.

Storage Store at -80 centigrade after receiving vials.

Concentration >50 µg/mL as determined by microplate BCA method

Storage Buffer 25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name Rad51 RAD51 recombinase [*Mus musculus* (house mouse)]

Official Symbol Rad51

Synonyms RAD51; RAD51 homolog (*S. cerevisiae*); DNA repair protein RAD51 homolog 1; RAD51 homolog A; RecA; Rad51a; AV304093

Gene ID 19361

mRNA Refseq NM_011234

Protein Refseq NP_035364

UniProt ID Q08297

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