

## Product datasheet for TP318333

### RAD51 (NM\_002875) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human RAD51 homolog (RecA homolog, E. coli) ( <i>S. cerevisiae</i> ) (RAD51), transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC218333 representing NM_002875 Red=Cloning site Green=Tags(s)

MAMQMQLLEANADTSVEEESFGPQPISRLEQCGINANDVKKLEEAGFHTVEAVAYAPKKELINIKGISEAK  
ADKILAEAAKLVPMGFTTATEFHQRRSEIIQITTSKELDKLLQGGIETGSITEMFGFERTGKTQICHTL  
AVTCQLPIDRGGGEGKAMYIDTEGTFRPERLLAVAERYGLSGSDVLDNVAYARAFNTDHQTQLLYQASAM  
MVESRYALLIVDSATALYRTDYSRGEALSARQMHLARFLRMLLRLADEFVAVVITNQVVAQVDGAAMFA  
ADPKKPIGGNIIAHASTTRLYLRKGRGETRICKIYDPSCLPEAEAMFAINADGVGDAKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	36.8 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
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
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.
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:	<a href="#">NP_002866</a>
Locus ID:	5888



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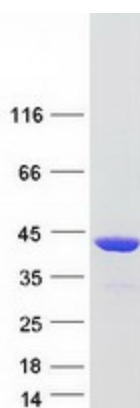
UniProt ID:	<a href="#">Q06609</a>
RefSeq Size:	2254
Cytogenetics:	15q15.1
RefSeq ORF:	1017
Synonyms:	BRCC5; FANCR; HRAD51; HsRad51; HsT16930; MRMV2; RAD51A; RECA

**Summary:** 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, and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with the ssDNA-binding protein RPA and RAD52, and it is thought to play roles in homologous pairing and strand transfer of DNA. This protein is also found to interact with BRCA1 and BRCA2, which may be important for the cellular response to DNA damage. BRCA2 is shown to regulate both the intracellular localization and DNA-binding ability of this protein. Loss of these controls following BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2009]

**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**Protein Pathways:** Homologous recombination, Pancreatic cancer, Pathways in cancer

### Product images:



Coomassie blue staining of purified RAD51 protein (Cat# TP318333). The protein was produced from HEK293T cells transfected with RAD51 cDNA clone (Cat# [RC218333]) using MegaTran 2.0 (Cat# [TT210002]).