

## Product datasheet for PH318333

### RAD51 (NM\_002875) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	RAD51 MS Standard C13 and N15-labeled recombinant protein (NP_002866)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC218333
Predicted MW:	36.8 kDa
Protein Sequence:	>RC218333 representing NM_002875 Red=Cloning site Green=Tags(s)  MAMQMQLLEANADTSVEEESFGPQPISRLEQCGINANDVKKLEEAGFHTVEAVAYAPKKELINIKGISEAK ADKILAEAAKLVPMGFTTATEFHQRSEIIQITTGSKELDKLLQGGIETGSITEMFGEFRTGKTQICHTL AVTCQLPIDRGGGEGKAMYIDTEGTFRPERLLAVAERYGLSGSDVLDNVAYARAFNTDHQTQLLYQASAM MVESRYALLIVDSATALYRTDYSGRGEL SARQMHLARFLRMLRLADEFVAVVITNQVVAQVDGAAMFA ADPKKPIGGNIIAHASTTRL YLRKGRGETRICKIYDSPCLPEAEAMFAINADGVGDAKD  TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_002866</a>
RefSeq Size:	2254
RefSeq ORF:	1017
Synonyms:	BRCC5; FANCR; HRAD51; HsRad51; HsT16930; MRMV2; RAD51A; RECA
Locus ID:	5888



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UniProt ID: [Q06609](#)

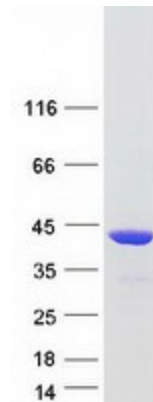
Cytogenetics: 15q15.1

**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]).