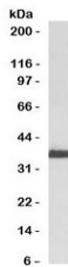


## RAD51 Antibody [clone RALPA-1] (V7333)

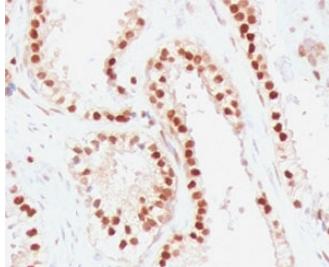
Catalog No.	Formulation	Size
V7333-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7333-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7333SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7333IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

[Bulk quote request](#)

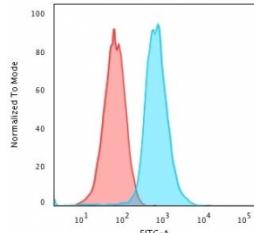
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2b, kappa
<b>Clone Name</b>	RALPA-1
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	Q06609
<b>Localization</b>	Nuclear
<b>Applications</b>	Flow Cytometry : 1-2ug/10 <sup>6</sup> cells Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Prediluted IHC Only Format : incubate for 30 min at RT (1)
<b>Limitations</b>	This RAD51 antibody is available for research use only.



Western blot testing of human HeLa cell lysate with RAD51 antibody (clone RALPA-1).  
Expected molecular weight ~37 kDa.



IHC staining of FFPE human colon carcinoma with RAD51 antibody (clone RALPA-1).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



Flow cytometry testing of human K562 cells with RAD51 antibody (clone RALPA-1);  
Red=isotype control, Blue= RAD51 antibody.

## Description

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. [RefSeq]

## Application Notes

The stated application concentrations are suggested starting points. Titration of the RAD51 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

A portion of amino acids 1-134 from the human protein was used as the immunogen for this RAD51 antibody.

## Storage

Store the RAD51 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

