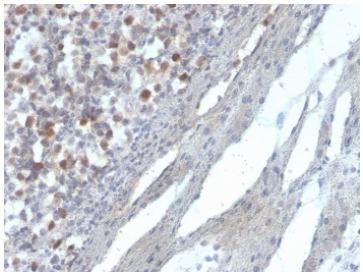
RAD51 Antibody [clone RAD51/2856] (V8466)

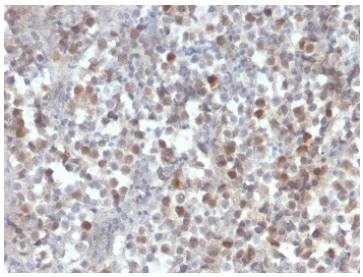
Catalog No.	Formulation	Size
V8466-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8466-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8466SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

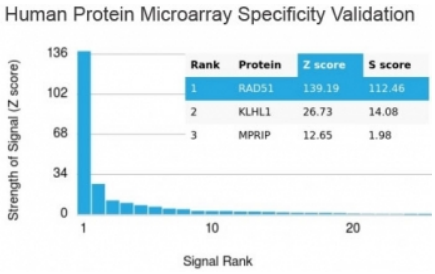
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	RAD51/2856
Purity	Protein G affinity chromatography
UniProt	Q06609
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This RAD51 antibody is available for research use only.



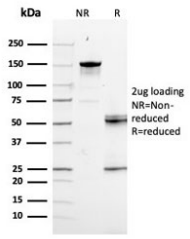
RAD51 Antibody Human Kidney IHC. Immunohistochemical staining of FFPE human kidney demonstrates RAD51 expression using a RAD51 antibody. RAD51, also known as a Homologous Recombination Protein, is a central mediator of DNA double strand break repair and maintenance of genomic stability. Nuclear staining is observed in renal cells, consistent with the requirement for efficient homologous recombination and DNA damage responses in highly metabolically active tissues. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris buffer containing 1 mM EDTA for 20 minutes followed by cooling prior to staining. These results support the utility of RAD51 Antibody for investigating genome maintenance, DNA repair pathways, and cellular responses to genotoxic stress.



IHC staining of FFPE human kidney with RAD51 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using RAD51 antibody. These results demonstrate the foremost specificity of the RAD51/2856 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free RAD51 antibody as confirmation of integrity and purity.

Description

RAD51 is one of the key factors of DNA repair by homologous recombination and has been shown to have anti-apoptotic activity in tumor cells. RAD51 protein interacts with a variety of tumor suppressor proteins including p53, BRCA1 and BRCA2. Elevated expression of RAD51 enhances radio-resistance of human tumor cells. Overexpression of RAD51 protein in tumor cells renders them resistant against cytotoxic drugs like Cisplatin. RAD51 interacts with BRCA1 and BRCA2 to influence subcellular localization and cellular response to DNA damage. BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis from deregulation of RAD51. High-level expression of RAD51 has been observed in a variety of human malignancies. RAD51 overexpression correlates with histological grading of the tumor in invasive ductal mammary carcinoma.

Explore our RAD51 Antibody page for additional antibodies against RAD51 Recombinase, including IHC and Protein Microarray validated reagents for studies of homologous recombination, DNA damage responses, and genome stability.

Application Notes

Optimal dilution of the RAD51 antibody should be determined by the researcher.

Immunogen

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

Storage

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

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