[KD Validated] Anti-RAD51 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021282

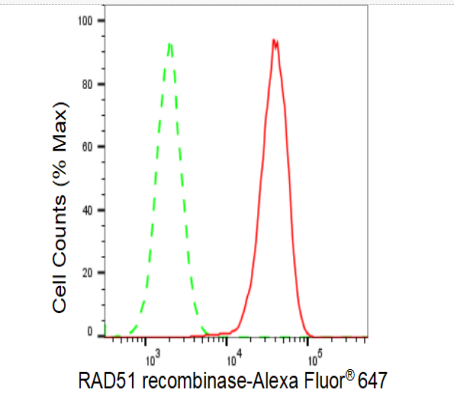
Product Information

Application	WB, FC, IF (Cell)/ICC, IHC-P/IF (Tissue-P)
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000; IHC-P 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	15N81H09
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Rad51
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-RAD51 Rabbit mAb [15N81H09] is for research use only and not for use in diagnostic or therapeutic procedures.

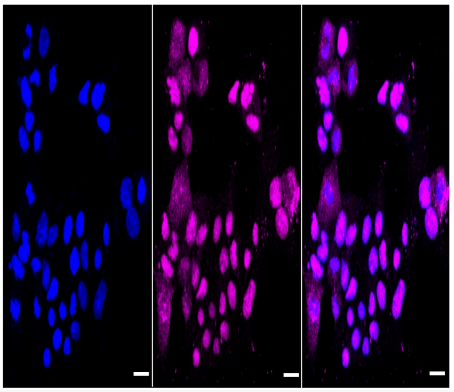
Protein Information

Synonyms	RAD51; RAD51 Recombinase; RAD51A; BRCC5; FANCR; RECA; BRCA1/BRCA2-Containing Complex, Subunit 5; DNA Repair Protein RAD51 Homolog 1; RAD51 Homolog A; HsT16930; HsRad51; HRAD51; RAD51 Homolog (RecA Homolog, E. Coli) (S. Cerevisiae); RAD51 (S. Cerevisiae) Homolog (E Coli RecA Homolog); RAD51 Homolog (S. Cerevisiae); RecA, E. Coli, Homolog Of; Recombination Protein A; RecA-Like Protein; HST16930; HSRAD51; HsRAD51; MRMV2.
Calculated MW	Calculated MW: 37 kDa, Observed MW: 36 kDa
Uniprot ID	Q06609
Gene ID	5888
Background	Rad51 participates in a common DNA damage response pathway associated with the activation of homologous recombination and double-strand break repair. Binds to single and double-stranded DNA and exhibits DNA-dependent ATPase activity. Underwinds duplex DNA and forms helical nucleoprotein filaments.

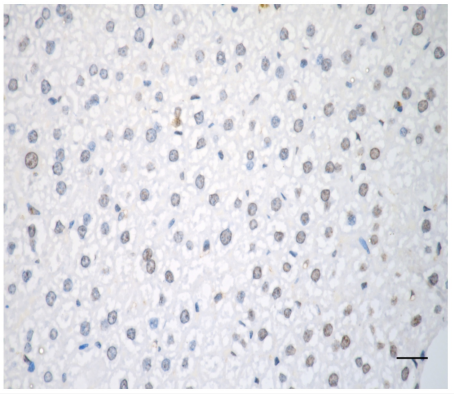
Validation Images



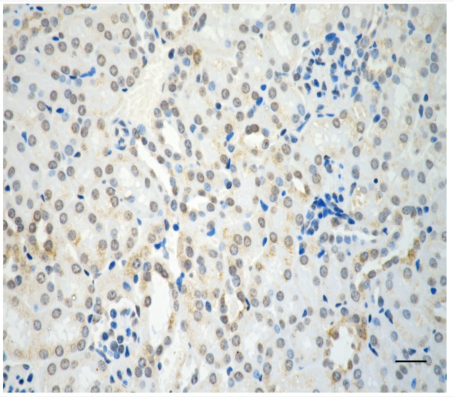
Flow cytometric analysis of RAD51 recombinase expression in HAP-1 cells using RAD51 recombinase antibody (R021282, 1:2,000). Green, isotype control; red, RAD51 recombinase.



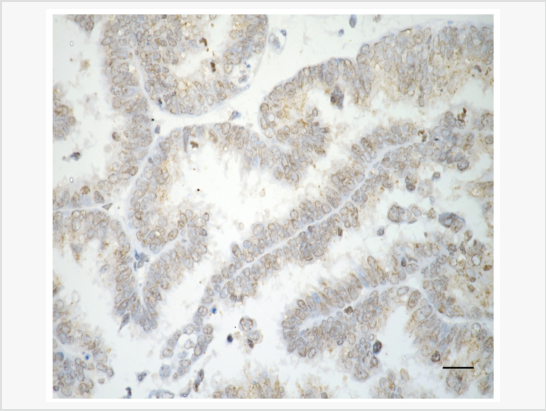
Immunocytochemical staining of HAP-1 cells with RAD51 recombinase antibody (R021282, 1:1,000). Nuclei were stained blue with DAPI; RAD51 recombinase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



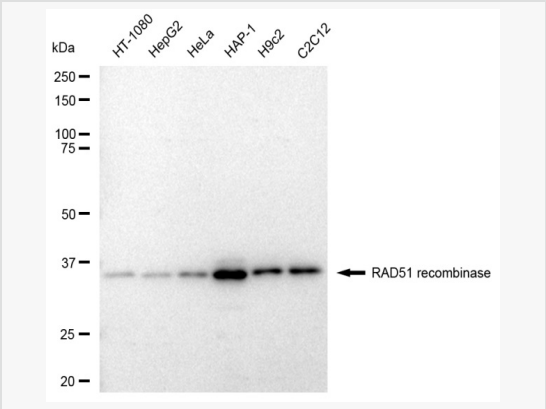
Immunohistochemistry was performed on paraffin-embedded mouse liver using RAD51 recombinase antibody (R021282, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



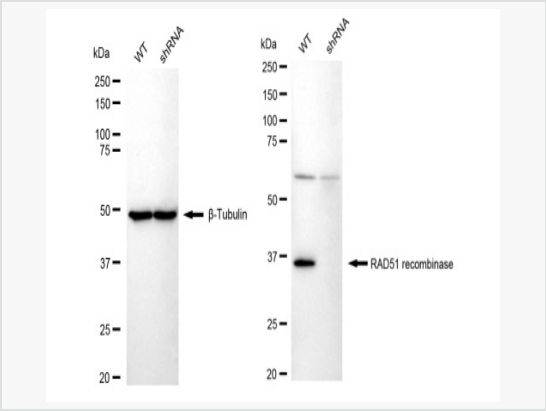
Immunohistochemistry was performed on paraffin-embedded mouse kidney using RAD51 recombinase antibody (R021282, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded human ovarian carcinoma using RAD51 recombinase antibody (R021282, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Western blotting analysis using RAD51 recombinase antibody (R021282). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with RAD51 recombinase antibody (R021282, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using RAD51 recombinase antibody (R021282). RAD51 recombinase expression in wild type (WT) and RAD51 recombinase shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with RAD51 recombinase antibody (R021282, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.