Datasheet for ABIN6259171

anti-RAD51C antibody (Internal Region)

3 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	RAD51C
Binding Specificity:	Internal Region
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAD51C antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunohistochemistry (IHC), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human Rad51C, corresponding to a region within the internal amino acids.
Isotype:	IgG
Specificity:	Rad51C Antibody detects endogenous levels of total Rad51C.
Predicted Reactivity:	Sheep
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	RAD51C

Target Details

Alternative Name:	RAD51C (RAD51C Products)
Background:	Description: Essential for the homologous recombination (HR) pathway of DNA repair. Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. Part of the RAD21 paralog protein complexes BCDX2 and CX3 which act at different stages of the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, BCDX2 seems to act downstream of BRCA2 recruitment and upstream of RAD51 recruitment, CX3 seems to act downstream of RAD51 recruitment, both complexes bind predominantly to the intersection of the four duplex arms of the Holliday junction (HJ) and to junction of replication forks. The BCDX2 complex was originally reported to bind single-stranded DNA, single-stranded gaps in duplex DNA and specifically to nicks in duplex DNA. The BCDX2 subcomplex RAD51B:RAD51C exhibits single-stranded DNA-dependent ATPase activity suggesting an involvement in early stages of the HR pathway. Involved in RAD51 foci formation in response to DNA damage suggesting an involvement in early stages of HR probably in the invasion step. Has an early function in DNA repair in facilitating phosphorylation of the checkpoint kinase CHEK2 and thereby transduction of the damage signal, leading to cell cycle arrest and HR activation. Participates in branch migration and HJ resolution and thus is important for processing HR intermediates late in the DNA repair process, the function may be linked to the CX3 complex. Part of a PALB2-scaffolded HR complex containing BRCA2 and which is thought to play a role in DNA repair by HR. Protects RAD51 from ubiquitin-mediated degradation that is enhanced following DNA damage. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and XRCC3. Contributes to DNA cross-link resistance, sister chromatid cohesion and genomic stability. Involved in maintaining centrosome number in mitosis. Gene: RAD51C
Molecular Weight:	50 kDa
Gene ID:	5889
UniProt:	O43502
Pathways:	DNA Damage Repair

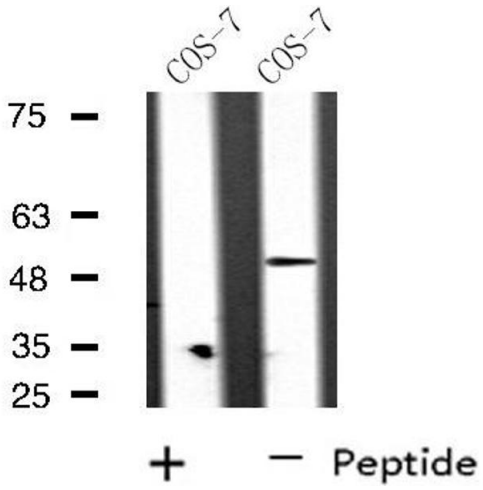
Application Details

Application Notes:	WB 1:500-1:1000, IF/ICC 1:100-1:500, IHC 1:50-1:200, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

Handling

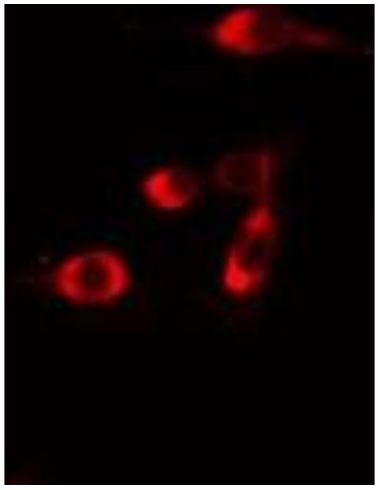
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



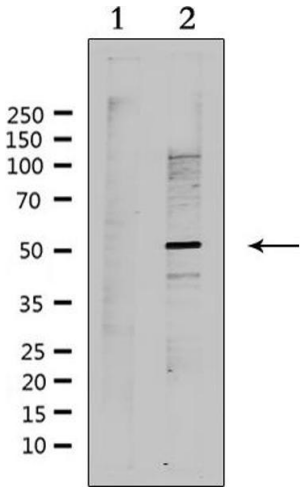
Western Blotting

Image 1. Western blot analysis of extracts from COS-7 cells, using RAD51L2 antibody.



Immunofluorescence (fixed cells)

Image 2. ABIN6275708 staining Hela cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25¡ãC. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37¡ãC. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody(Cat.# S0006), diluted at 1/600, was used as secondary antibod



Western Blotting

Image 3. Western blot analysis of extracts from Hela, using RAD51L2 Antibody. Lane 1 was treated with the antigen-specific peptide.

