

XRCC3 Antibody

Catalog No: #33548

Package Size: #33548-1 50ul #33548-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

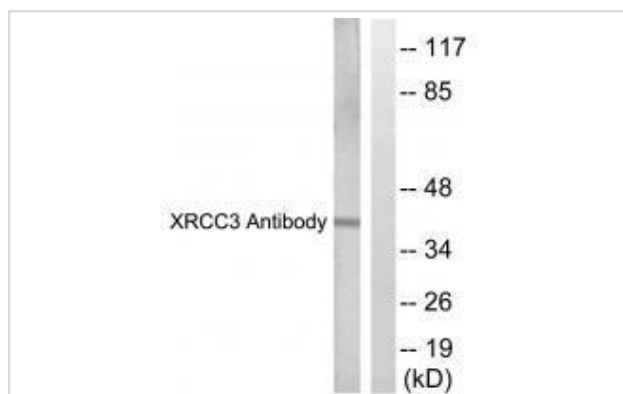
Product Name	XRCC3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total XRCC3 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from Internal of human XRCC3.
Target Name	XRCC3
Other Names	X-RAY REPAIR CROSS- COMPLEMENTING PROTEIN 3; X-RAY REPAIR; COMPLEMENTING DEFECTIVE IN CHINESE HAMSTER 3;
Accession No.	Swiss-Prot: O43542NCBI Gene ID: 7517
Uniprot	O43542
GeneID	7517;
SDS-PAGE MW	38kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

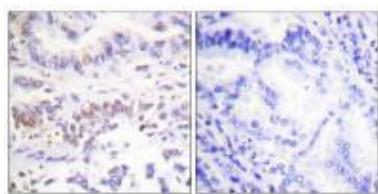
Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from HepG2 cells, treated with Adriamycin (0.5uM, 5hours), using XRCC3 antibody #33548.

Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue using XRCC3 antibody #33548.



Background

Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA, thought to repair chromosomal fragmentation, translocations and deletions. Part of the RAD21 paralog protein complex CX3 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, CX3 acts downstream of RAD51 recruitment; the complex binds predominantly to the intersection of the four duplex arms of the Holliday junction (HJ) and to junctions of replication forks. Involved in HJ resolution and thus in processing HR intermediates late in the DNA repair process; the function may be linked to the CX3 complex and seems to involve GEN1 during mitotic cell cycle progression. Part of a PALB2-scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and RAD51C.

Hitoshi Kurumizaka, Nucleic Acids Res., Jul 2003; 31: 4041 - 4050.

Anna Renglin Lindh, Hum. Mol. Genet., Apr 2006; 15: 1217 - 1224.

Zhi-Yuan Xu, J. Pharmacol. Exp. Ther., Aug 2005; 314: 495 - 505.

Nazumi Alice Yamada, J. Biol. Chem., May 2004; 279: 232

Note: This product is for in vitro research use only