ARG59229
anti-XRCC4 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes XRCC4
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	XRCC4
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 49-75 of Human XRCC4. (ESEISQEADDMAMEKGKYVGELRKALL)
Conjugation	Un-conjugated
Alternate Names	DNA repair protein XRCC4; SSMED; X-ray repair cross-complementing protein 4

Application Instructions

Application table

Application	Dilution
IHC-P	0.5 - 1 µg/ml
WB	0.1 - 0.5 µg/ml

Application Note

IHC-P: Antigen Retrieval: By heat mediation.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

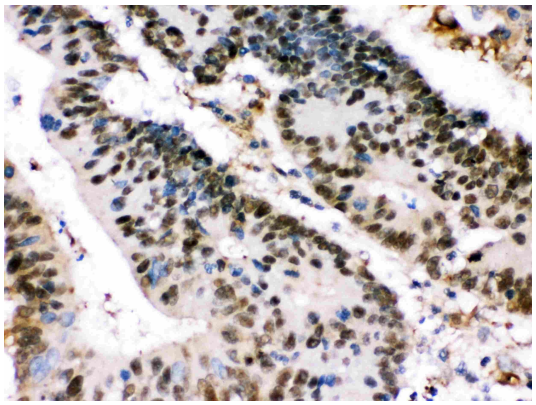
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

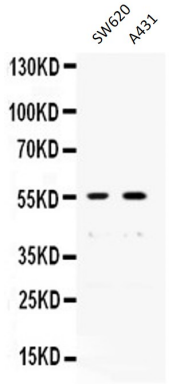
Gene Symbol	XRCC4
Gene Full Name	X-ray repair complementing defective repair in Chinese hamster cells 4
Background	The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand break by non-homologous end joining and the completion of V(D)J recombination events. The non-homologous end-joining pathway is required both for normal development and for suppression of tumors. This gene functionally complements XR-1 Chinese hamster ovary cell mutant, which is impaired in DNA double-strand breaks produced by ionizing radiation and restriction enzymes. Alternative transcription initiation and alternative splicing generates several transcript variants. [provided by RefSeq, Sep 2008]
Function	Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. Binds to DNA and to DNA ligase IV (LIG4). The LIG4-XRCC4 complex is responsible for the NHEJ ligation step, and XRCC4 enhances the joining activity of LIG4. Binding of the LIG4-XRCC4 complex to DNA ends is dependent on the assembly of the DNA-dependent protein kinase complex DNA-PK to these DNA ends. [UniProt]
Calculated Mw	38 kDa
PTM	Phosphorylated by PRKDC. The phosphorylation seems not to be necessary for binding to DNA. Phosphorylation by CK2 promotes interaction with APTX. Monoubiquitinated. Sumoylation at Lys-210 is required for nuclear localization and recombination efficiency. Has no effect on ubiquitination. [UniProt]
Cellular Localization	Nucleus. [UniProt]

Images



ARG59229 anti-XRCC4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer stained with ARG59229 anti-XRCC4 antibody at 1 µg/ml dilution.



ARG59229 anti-XRCC4 antibody WB image

Western blot: SW620 and A431 whole cell lysates stained with ARG59229 anti-XRCC4 antibody at 0.5 µg/ml dilution.