ARG56277
anti-Rad50 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Rad50
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Rad50
Species	Human
Immunogen	Synthetic peptide of Human Rad50
Conjugation	Un-conjugated
Alternate Names	EC 3.6.-.-; RAD502; NBSLD; hRAD50; hRad50; DNA repair protein RAD50

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
IP	Assay-dependent
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	A549

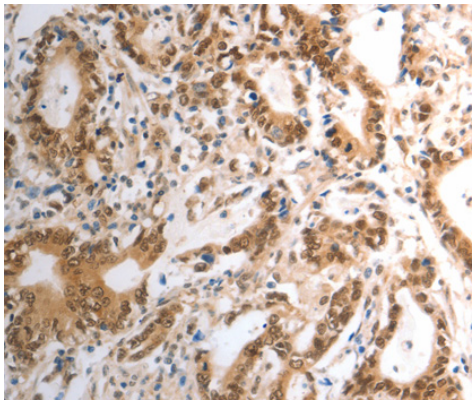
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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. 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

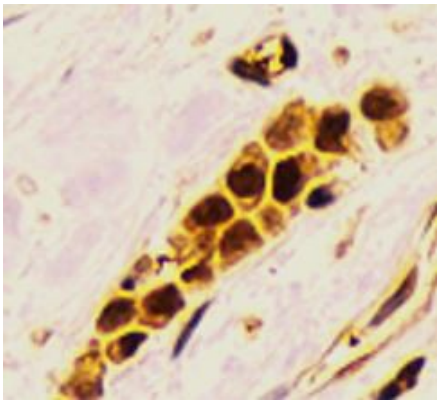
Database links	GeneID: 10111 Human GeneID: 64012 Rat Swiss-port # Q92878 Human Swiss-port # Q9JIL8 Rat
Gene Symbol	RAD50
Gene Full Name	RAD50 homolog (S. cerevisiae)
Background	The protein encoded by this gene is highly similar to Saccharomyces cerevisiae Rad50, a protein involved in DNA double-strand break repair. This protein forms a complex with MRE11 and NBS1. The protein complex binds to DNA and displays numerous enzymatic activities that are required for nonhomologous joining of DNA ends. This protein, cooperating with its partners, is important for DNA double-strand break repair, cell cycle checkpoint activation, telomere maintenance, and meiotic recombination. Knockout studies of the mouse homolog suggest this gene is essential for cell growth and viability. Mutations in this gene are the cause of Nijmegen breakage syndrome-like disorder.[provided by RefSeq, Apr 2010]
Function	Component of the MRN complex, which plays a central role in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11A. RAD50 may be required to bind DNA ends and hold them in close proximity. This could facilitate searches for short or long regions of sequence homology in the recombining DNA templates, and may also stimulate the activity of DNA ligases and/or restrict the nuclease activity of MRE11A to prevent nucleolytic degradation past a given point. The complex may also be required for DNA damage signaling via activation of the ATM kinase. In telomeres the MRN complex may modulate t-loop formation. [UniProt]
Calculated Mw	154 kDa

Images



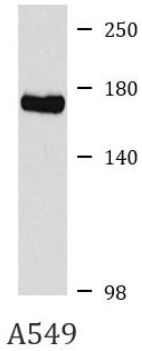
ARG56277 anti-Rad50 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human gastric cancer stained with ARG56277 anti-Rad50 antibody.



ARG56277 anti-Rad50 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach cancer stained with ARG56277 anti-Rad50 antibody at 1:200 dilution.



ARG56277 anti-Rad50 antibody WB image

Western blot: A549 cell lysate stained with ARG56277 anti-Rad50 antibody.