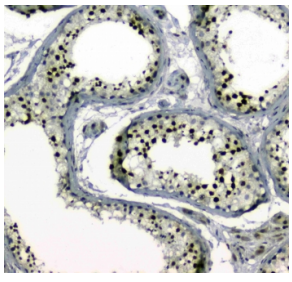
MDC1 Antibody (RQ4235)

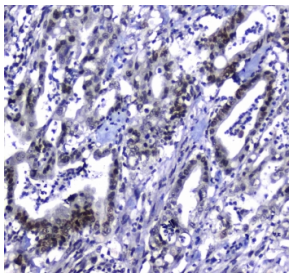
Catalog No.	Formulation	Size
RQ4235	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

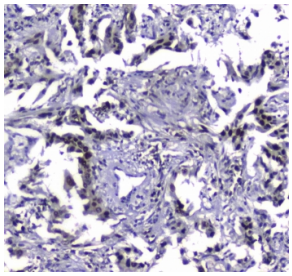
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q14676
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Immunofluorescence (FFPE): 2-4ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This MDC1 antibody is available for research use only.



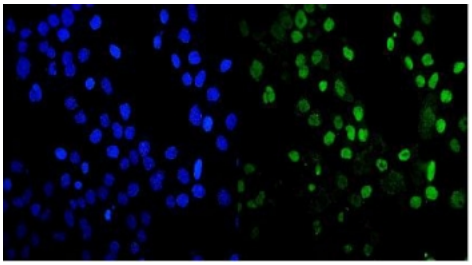
IHC testing of FFPE human testis tissue with MDC1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



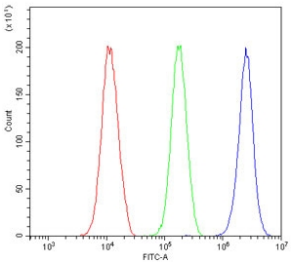
IHC testing of FFPE human colon cancer tissue with STUB1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE human lung cancer tissue with STUB1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Immunofluorescent staining of FFPE human A431 cells with MDC1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human 293T cells with MDC1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MDC1 antibody.

Description

Mediator of DNA damage checkpoint protein 1 is a 2080 amino acid long protein that in humans is encoded by the MDC1 gene. The protein encoded by this gene contains an N-terminal forkhead domain, two BRCA1 C-terminal (BRCT) motifs and a central domain with 13 repetitions of an approximately 41-amino acid sequence. The encoded protein is required to activate the intra-S phase and G2/M phase cell cycle checkpoints in response to DNA damage. This nuclear protein interacts with phosphorylated histone H2AX near sites of DNA double-strand breaks through its BRCT motifs, and facilitates recruitment of the ATM kinase and meiotic recombination 11 protein complex to DNA damage foci.

Application Notes

Optimal dilution of the MDC1 antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids A534-Q626 was used as the immunogen for the MDC1 antibody.

Storage

After reconstitution, the MDC1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at

-20oC. Avoid repeated freezing and thawing.

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