## For Research Use Only

# MDC1 Polyclonal antibody

Catalog Number:24721-1-AP

4 Publications



**Purification Method:** 

WB 1:500-1:2000

IHC 1:50-1:500

IF 1:500-1:2000

Antigen affinity purification Recommended Dilutions:

**Basic Information** 

 Catalog Number:
 GenBank Accession Number:

 24721-1-AP
 BC152556

 Size:
 GeneID (NCBI):

 1400 µ g/ml
 9656

 1400 μ g/ml
 9656

 Source:
 UNIPROT ID:

 Rabbit
 Q14676

 Isotype:
 Full Name:

IgG mediator of DNA damage checkpoint

Immunogen Catalog Number: 1

AG20135 Calculated MW:

2089 aa, 227 kDa

**Applications** 

Tested Applications: WB, IF/ICC, IHC, ELISA Cited Applications: WB, IF

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Species Specificity:

Cited Species: human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: HeLa cells,

IF: HEK-293 cells,

IHC: mouse testis tissue,

# **Background Information**

MDC1, also named as KIAA0170 or NFBD1, is a 2089 amino acid protein, which contains two BRCT domains and one FHA domain. MDC1 localizes in the nucleus and is highly expressed in testis. MDC1 is required for checkpoint mediated cell cycle arrest in response to DNA damage within both the S phase and G2/M phases of the cell cycle. MDC1 may serve as a scaffold for the recruitment of DNA repair and signal transduction proteins to discrete foci of DNA damage marked.

#### Notable Publications

Author	Pubmed ID	Journal	Application
Jiao Zhao	35597237	Mol Cell	WB
Yuanyuan Zhao	29567990	Cell Death Dis	IF
Rong Xie	35378404	DNA Repair (Amst)	WB

Storage

Storage

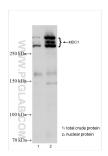
Store at -20°C. Stable for one year after shipment.

Storage Buffer

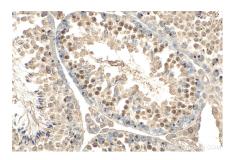
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

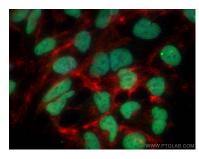
## **Selected Validation Data**



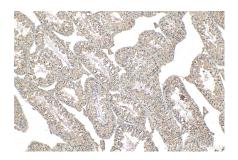
Various lysates were subjected to SDS PAGE followed by western blot with 24721-1-AP (MDC 1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using 24721-1-AP (MDC1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using MDC1 antibody (24721-1-AP) at dilution of 1:1000 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using 24721-1-AP (MDC 1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).