

### ARG45128 anti-MDC1 antibody

Package: 50 μg Store at: -20°C

## Summary

Product Description	Rabbit Polyclonal antibody recognizes MDC1
Tested Reactivity	Hu
Tested Application	FACS, ICC, IHC-P
Host	Rabbit
Clonality	Polyclonal
lsotype	Rabbit IgG
Target Name	MDC1
Species	Human
Immunogen	Recombinant protein containing to human MDC1.
Conjugation	Un-conjugated
Alternate Names	Mediator of DNA damage checkpoint protein 1; Nuclear factor with BRCT domains 1; MDC1; KIAA0170; NFBD1

# **Application Instructions**

Application table	Application	Dilution
	FACS	1 - 3 μg/10^6 cells
	ICC	
	IHC-P	0.5-1 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	50 kDa	

## Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
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.

## Bioinformation

Gene Symbol	MDC1
Gene Full Name	mediator of DNA damage checkpoint 1
Background	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. [provided by RefSeq, Jul 2008]
Function	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. May serve as a scaffold for the recruitment of DNA repair and signal transduction proteins to discrete foci of DNA damage marked by 'Ser-139' phosphorylation of histone H2AFX. Also required for downstream events subsequent to the recruitment of these proteins. These include phosphorylation and activation of the ATM, CHEK1 and CHEK2 kinases, and stabilization of TP53 and apoptosis. ATM and CHEK2 may also be activated independently by a parallel pathway mediated by TP53BP1. [UniProt]
Calculated Mw	226 kDa
РТМ	Acetylation; Isopeptide bond; Methylation; Ubl conjugationPhosphorylation. [UniProt]
Cellular Localization	Nucleus; Chromosome. [UniProt]

#### Images



#### ARG45128 anti-MDC1 antibody IHC-P image

Immunohistochemistry: Human colon cancer stained with ARG45128 anti-MDC1 antibody at 1  $\mu g/ml$  dilution.



#### ARG45128 anti-MDC1 antibody ICC/IF image

Immunofluorescence: A431 stained with ARG45128 anti-MDC1 antibody at 2 ug/ml dilution.



#### ARG45128 anti-MDC1 antibody FACS image

Flow Cytometry: 293T stained with ARG45128 anti-MDC1 antibody at 1  $\mu\text{g}/10^{4}$  cells dilution.