

# Recombinant Human Mediator of DNA damage checkpoint protein 1(MDC1),partial

Catalog No: #AP74515

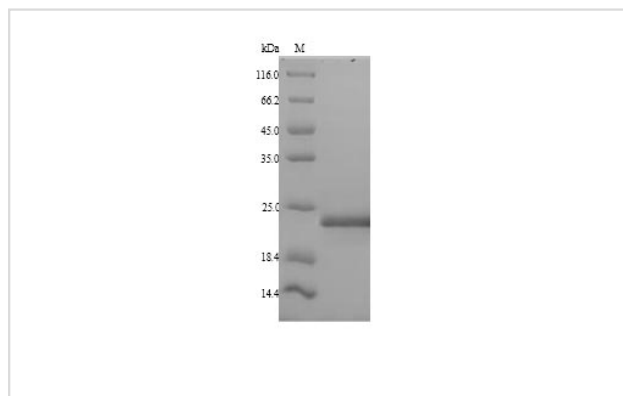
Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

Package Size: #AP74515-1 20ug #AP74515-2 100ug #AP74515-3 1mg

## Description

Product Name	Recombinant Human Mediator of DNA damage checkpoint protein 1(MDC1),partial
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1892-2082aaSequence Info:Partial
Other Names	Nuclear factor with BRCT domains 1
Accession No.	Q14676
Uniprot	Q14676
GeneID	9656;
Calculated MW	22.9 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	APKVLFTGVVDARGERAVLALGGSLAGSAAEASHLVTDIRRRTVKFLCALGRGIPILSLDWLHQSRKAGFFLPP DEYVVTDPQEKNFGFSLQDALSRARERRLLEGYEIYVTPGVQPPPPQMGEIISCCGGTYLPSMPRSYKPQR VVITCPQDFPHCSIPLRVGLPLLSPEFLLTGVLKQEAKPEAFVLS
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.  Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

## Images



## Background

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.

## References

"53BP1 and NBS1, MDC1-Nbs1 function in parallel interacting pathways activating ataxia-telangiectasia mutated (ATM) in response to DNA damage." Mochan T.A., Venere M., DiTullio R.A. Jr., Halazonetis T.D. Cancer Res. 63:8586-8591(2003). Research Topic: Epigenetics and Nuclear Signaling

Note: This product is for in vitro research use only