

Recombinant Human MDC1 Protein (1892-2082 aa), His-SUMO-tagged

Cat. No. MDC1-2343H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human MDC1 Protein (1892-2082 aa) is produced by E. coli expression system. This protein is fused with a 6xHis-SUMO tag at the N-terminal. Protein Description: Partial.
Species	Human
Source	E.coli
ProteinLength	1892-2082 aa
Description	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.
Form	Tris-based buffer,50% glycerol
Molecular Mass	36.9 kDa
AA Sequence	APKVLFTGVVDARGERAVLALGGSLAGSAAEASHLVTDRIIRRTVKFLCALGRGIPILS

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

LDWLHQSRKAGFFLPPDEYVVTDPPEQEKNFQFSLQDALSRRARERRLLEGYEIYVTP
 GVQPPPPQMGEIISCCGGTYLPSMPRSYPQRVVITCPQDFPHCSIPLRVGLPLLSP
 EFLLTGVLKQEAKPEAFVLS

Purity > 90% as determined by SDS-PAGE.

Notes Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.

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 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.

Concentration A hardcopy of COA will be sent along with the products. Please refer to it for detailed information.

GENE INFORMATION

Gene Name [MDC1 mediator of DNA-damage checkpoint 1 \[Homo sapiens \]](#)

Official Symbol [MDC1](#)

Synonyms MDC1; Em:AB023051.5; KIAA0170; NFBD1; nuclear factor with BRCT domains 1; MGC166888; DKFZp781A0122;

Gene ID [9656](#)

mRNA Refseq [NM_014641](#)

Protein Refseq [NP_055456](#)

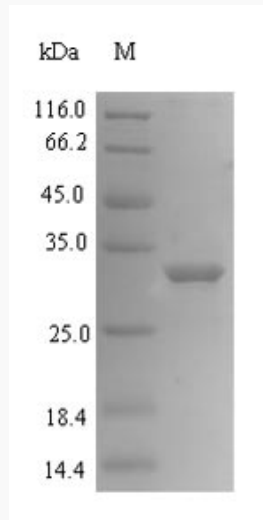
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MIM 607593

UniProt ID Q14676



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

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