

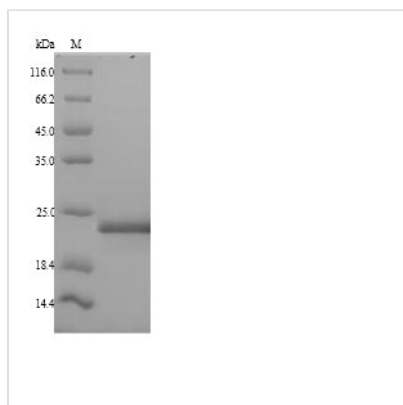


# Recombinant Human Mediator of DNA damage checkpoint protein 1 (MDC1), partial

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Product Code</b>      | CSB-YP623929HU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Relevance</b>         | 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. |
| <b>Abbreviation</b>      | Recombinant Human MDC1 protein, partial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Storage</b>           | 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.                                                                                                                                                                                                                                                                                                                                                      |
| <b>Uniprot No.</b>       | Q14676                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Alias</b>             | Nuclear factor with BRCT domains 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen Species</b> | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>            | ≥ 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Sequence</b>          | APKVLFTGVVDARGERAVLALGGSLAGSAAEASHLVTDRIIRRTVKFLCALGRGI<br>PILSLDWLHQSRKAGFFLPDEYVVTDPQEKNFGFSLQDALSRRERRRLLLEG<br>YEIYVTPGVQPPPPQMGEIISCCGGTYLPSMPRSYKPQRVVITCPQDFPHCSIP<br>LRVGLPLLSPEFLLTGVLKQEAKEAFVLS                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Research Area</b>     | Epigenetics and Nuclear Signaling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>            | Yeast                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Target Names</b>      | MDC1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Protein Names</b>     | Recommended name: Mediator of DNA damage checkpoint protein 1<br>Alternative name(s): Nuclear factor with BRCT domains 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Expression Region</b> | 1892-2082aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Tag Info</b>          | N-terminal 6xHis-tagged                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Mol. Weight</b>       | 22.9kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Length</b>    | Partial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



## Image



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

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

## Shelf Life

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.