

## Recombinant MDM2 protein



**Catalog No:** 82044, 82644

**Expressed In:** *E. coli*

**Quantity:** 50, 1000 µg

**Source:** Human

**Buffer Contents:** Recombinant MDM2 protein is supplied in 25 mM Tris 8.0, 300mM NaCl, 20% glycerol, 0.5 mM TCEP.

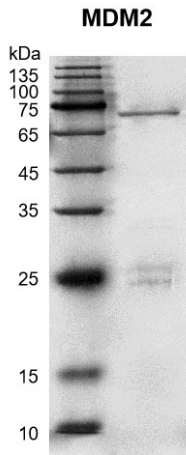
**Background: MDM2 (E3 ubiquitin-protein ligase Mdm2)** also known as ACTFS, hdm2, HDMX and LSKB. **MDM2** is a E3 ubiquitin-protein ligase that mediates ubiquitination of p53/TP53, leading to its degradation by the proteasome. Inhibits p53/TP53- and p73/TP73-mediated cell cycle arrest and apoptosis by binding its transcriptional activation domain. Also acts as a ubiquitin ligase E3 toward itself and ARRB1. Permits the nuclear export of p53/TP53. Promotes proteasome dependent ubiquitin-independent degradation of retinoblastoma RB1 protein. Inhibits DAXX-mediated apoptosis by inducing its ubiquitination and degradation. Component of the TRIM28/KAP1-MDM2-p53/TP53 complex involved stabilizing p53/TP53. Also a component of the TRIM28/KAP1-ERBB4-MDM2 complex which links growth factors and DNA damage response pathways. Mediates ubiquitination and subsequent proteasome degradation of DYRK2 in nucleus. Ubiquitinates IGF1R and SNAI1 and promotes them to proteasomal degradation.

**Protein Details:** Recombinant MDM2 protein that includes full length of human MDM2 protein (accession number NP\_001354919.1) was expressed in *E. coli* and contains an N-terminal His tag with a molecular weight of 57.40 kDa. The purity of the protein is ≥ 95% by SDS-PAGE.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for this product is shown.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

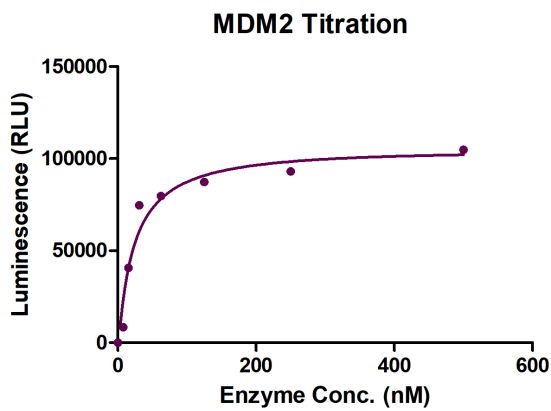


**Recombinant MDM2 protein**

12.5% SDS-PAGE Coomassie staining

MW: 57.40 kDa,

Purity:  $\geq 80\%$



**ELISA for MDM2 activity**

ELISA plate was coated with 50 ng p53 protein in each well. Then 63 nM UBA1, 1  $\mu$ M UBE2D1, 7.9  $\mu$ M Ubiquitin and 25  $\mu$ M ATP and different concentrations of MDM2 protein in 50  $\mu$ l reaction system containing 40 mM Tris-HCl pH 7.4, 20 mM MgCl<sub>2</sub>, 0.5 mM DTT, 0.1 mg/ml BSA were added in each well and incubated at 37°C for 1 hour. Anti-Ubiquitin (Cat.39741) antibody was used to detect reaction products.