

Recombinant Human MDM2, GST

#R00510

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 6 months from date of receipt, -20 to -70 °C as supplied.
- 3 months, -20 to -70 °C under sterile conditions after opening.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Double minute 2 protein (Mdm2, also known as Hdm2) is a RING-finger Ubiquitin E3 ligase that acts as a major regulator of the tumor suppressor p53. Mdm2 inhibits p53-mediated cell cycle arrest and apoptosis by binding its transcriptional activation domain. The E3 ligase activity is confined to the C-terminal domain of Mdm2 and is responsible for the ubiquitination and subsequent proteasomal degradation of p53. Although the isolated RING domain is capable of p53 ubiquitination, other regions of the protein including a central acidic domain are also crucial for full E3 ligase activity. Mdm2 also regulates its own intracellular levels by auto-ubiquitination, and can be SUMOylated which decreases autoubiquitination activity but increases activity toward p53. Mdm2 also affects the cell cycle and apoptosis through interactions with other proteins such as retinoblastoma1 (pRB) and ribosomal protein L5.

AA Sequence

MSPILGYWKIKGLVQPTRLLEYLEEKYEELHYERDE
GDKWRNKKFELGLEFPNLPYYIDGDVKLTQSMIIRYI
ADKHNM LGGCPKERA EISMLEGAVLDIRYGVSR IAYS
KDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDHV
THPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAI
PQIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLE
VLFQGP MCNTNMSVPTDGA VTTSQIPASEQETLVRP
KPLLLKLLKSVGAQKDTYTMKEVLFYLGQYIMTKRLY
DEKQQHIVYCSNDLLGDLFGVPSFSVKEHRKIYTMIIY
RNLVVVNQQESSDSGTSVSEN RCHLEGGSDQKDLV
QELQEEKPSSSHLVSRPSTSSRRRAISET EENSDELS
GERQKRHKSDSISLSFDES LALCVIREICCERSSSS
ESTGTPSNPDLDAGVSEHSGDWLDQDSVSDQFSVE
FEVESLDSE DYSLSEEGQELSDEDD E VYQVT VYQAG
ESD TDSFEEDPEISLADYWKCTSCNEMNPPLPSHCN
RCWALRENWLPEDKGKDKGEISEKAKLENSTQAE EG
FDVPDCKKTIVNDSRESCVEENDDKITQASQSQESE
DYSQPSTSSSIYSSQEDVKEFEREETQDK EESV ESS

LPLNAIEPCVICQGRPKNGCIVHGKTGHLMACFTCAK
KLKKRNKPCPVCRQPIQMIVLTYFP

Reconstitution

Product Specification

Accession	Q00987.1
GeneID	4193
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 82KDa, a single non-glycosylated polypeptide chain containing 719 amino acids.
Purity	≥70% by SDS-PAGE analysis.
Biological Activity	Test in Process.
Physical Appearance	Sterile Colorless liquid.
Formulation	Supplied as a 0.2 μm filtered concentrated sterile solution in 50mM Tris, 150mM NaCl, 5mM TCEP, 10% glycerol, pH8.00.
Shipping	The product is shipped with polar

packs. Upon receipt, store it immediately at the temperature recommended below.
