

Anti-Mdmx/Hdmx p-Ser367 antibody, mouse monoclonal (#15)

Product code	71-141
Size	100 µg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Synthetic peptide corresponding to a sequence of human Mdmx protein surrounding phospho-Ser367
Isotype	Mouse IgG2bk
Reactivity	Human and mouse MdmX proteins phosphorylated at Ser367
Special notes	N/A
Application	<ol style="list-style-type: none"> 1. Western blotting (~1 µg/ml) 2. Immunoprecipitation 3. ELISA 4. Indirect immuno-staining
Background	<p>MdmX (synonyms: Mdm4, HdmX) inhibits p53-and p73-dependent cell cycle arrest and apoptosis by binding to the transcription activation domains of these proteins. MdmX consists of 490 amino acids with the molecular weight of 54,864 and contains a RING-finger domain and a nuclear transport signal. It is known that the protein migrates aberrantly in SDS-PAGE at the position of an 80-kDa protein. MdmX is phosphorylated at Ser367 by Chk2 kinase downstream of ATM in response to DNA damage, and as a result, it binds to 14-3-3 and is transported into nucleus where it is degraded by Mdm2. This process activates the p53 functions (1, 2 and 3).</p>
Data Link	UniProtKB/Swiss-Prot O15151 (MDM4_HUMAN)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 71-141 Anti-Mdmx/Hdmx p-Ser367 antibody, mouse monoclonal (#15)

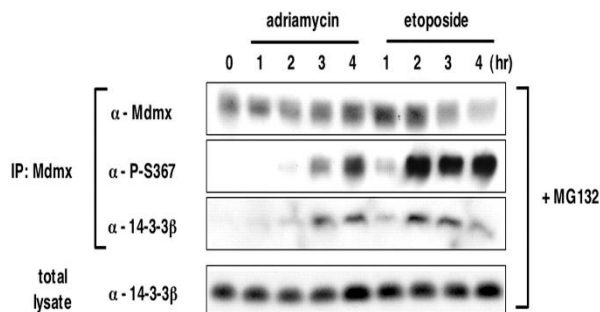


Fig.1 Induction of S367 phosphorylation after DNA damage is associated with increased binding of 14-3-3 to MdmX and accelerated MdmX degradation.

MCF cells were preincubated with the proteasome inhibitor MG132 (20 μ M) and exposed to DNA damaging agent, adriamycin (3 μ M) or etoposide (20 μ M), for the indicated periods. The cell lysates were used for immunoprecipitation with anti-MdmX antibody (D-19, Santa-Cruz) and The MdmX immunoprecipitates and the total lysate were analyzed by Western blotting using the indicated antibodies including this product (anti P-S367).

References: This product was used in reference 1.

1. Okamoto K *et al* "DNA damage-induced phosphorylation of MdmX at serine 367 activates p53 by targeting Mdm2-dependent degradation" *Mol Cell Biol* 25:9608-9620 (2005) PMID: [16227609](https://pubmed.ncbi.nlm.nih.gov/16227609/)
2. Chen L *et al* "ATM and Chk2-dependent phosphorylation of MDMX contribute to p53 activation after DNA damage" *EMBO J* 24: 3411-3422 (2005) PMID: [16163388](https://pubmed.ncbi.nlm.nih.gov/16163388/)
3. Pereg Y *et al* "Differential roles of ATM- and Chk2 mediated phosphorylations of HdmX in response to DNA damage" *Mol Cell Biol* 26: 6819-6831 (2006) PMID: [16943424](https://pubmed.ncbi.nlm.nih.gov/16943424/)