10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MDM2-S186 Phospho Peptide
Synthetic Peptide
Catalog # SP2041a

Specification

MDM2-S186 Phospho Peptide - Product Information

Primary Accession	P56950
Other Accession	Q7YRZ8, Q00987
Sequence	**RQRKRHK(pS)DSISLSFC**

MDM2-S186 Phospho Peptide - Additional Information

Gene ID 403693

Other Names
E3 ubiquitin-protein ligase Mdm2, 632-, Double minute 2 protein, Cdm2, p53-binding protein Mdm2, MDM2

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MDM2-S186 Phospho Peptide - Protein Information

Name MDM2

Function
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 in stabilizing p53/TP53. Also a component of the TRIM28/KAP1-ERBB4-MDM2 complex which links growth factor 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. Ubiquitinates DCX, leading to DCX degradation and reduction of the dendritic spine density of olfactory bulb granule cells. Ubiquitinates DLG4, leading to proteasomal degradation of DLG4 which is required for AMPA receptor endocytosis (By similarity). Negatively regulates NDUFS1, leading to decreased mitochondrial respiration, marked oxidative stress, and commitment to the mitochondrial pathway of apoptosis (By similarity). Binds NDUFS1 leading to its cytosolic retention rather than

mitochondrial localization resulting in decreased supercomplex assembly (interactions between complex I and complex III), decreased complex I activity, ROS production, and apoptosis (By similarity).

Cellular Location

Nucleus, nucleoplasm {ECO:0000250|UniProtKB:P23804}. Cytoplasm {ECO:0000250|UniProtKB:P23804}. Nucleus, nucleolus {ECO:0000250|UniProtKB:P23804}. Nucleus {ECO:0000250|UniProtKB:Q00987} Note=Expressed predominantly in the nucleoplasm. Interaction with ARF(P14) results in the localization of both proteins to the nucleolus The nucleolar localization signals in both ARF(P14) and MDM2 may be necessary to allow efficient nucleolar localization of both proteins Colocalizes with RASSF1 isoform A in the nucleus (By similarity) {ECO:0000250|UniProtKB:P23804, ECO:0000250|UniProtKB:Q00987}

Tissue Location

Isoform Mdm2-alpha is present in lymphoid and testicular tissues

MDM2-S186 Phospho Peptide - Images