

[17290220](http://www.uniprot.org/citations/17290220), PubMed: [19098711](http://www.uniprot.org/citations/19098711), PubMed: [19219073](http://www.uniprot.org/citations/19219073), PubMed: [19837670](http://www.uniprot.org/citations/19837670), PubMed: [19965871](http://www.uniprot.org/citations/19965871), PubMed: [20173098](http://www.uniprot.org/citations/20173098), PubMed: [20385133](http://www.uniprot.org/citations/20385133), PubMed: [20858735](http://www.uniprot.org/citations/20858735), PubMed: [22128911](http://www.uniprot.org/citations/22128911)). Ubiquitinates DCX, leading to DCX degradation and reduction of the dendritic spine density of olfactory bulb granule cells (By similarity). 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 (PubMed: [30879903](http://www.uniprot.org/citations/30879903)). 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 (PubMed: [30879903](http://www.uniprot.org/citations/30879903)).

Cellular Location

Nucleus, nucleoplasm. Cytoplasm. Nucleus, nucleolus. Nucleus. 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

Tissue Location

Ubiquitous. Isoform Mdm2-A, isoform Mdm2-B, isoform Mdm2-C, isoform Mdm2-D, isoform Mdm2-E, isoform Mdm2-F and isoform Mdm2-G are observed in a range of cancers but absent in normal tissues

MDM2-S166 Phospho Peptide - Images