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FBXO7 Polyclonal Antibody

Catalog # AP74008

Product Information

Application	WB
Primary Accession	Q9Y3I1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58503

Additional Information

Gene ID	25793
Other Names	FBXO7 FBX7
Dilution	WB~~WB 1:500-2000, ELISA 1:10000-20000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	FBXO7
Synonyms	FBX7
Function	Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins and plays a role in several biological processes such as cell cycle, cell proliferation, or maintenance of chromosome stability (PubMed:15145941, PubMed:34791250). Recognizes and ubiquitinates BIRC2 and the cell cycle regulator DLGAP5 (PubMed:15145941, PubMed:16510124, PubMed:22212761). Plays a role downstream of PINK1 in the clearance of damaged mitochondria via selective autophagy (mitophagy) by targeting PRKN to dysfunctional depolarized mitochondria. Promotes MFN1 ubiquitination. Mediates the ubiquitination and proteasomal degradation of UXT isoform 2, thereby impairing the NF-kappa-B signaling pathway (PubMed:33010352). Inhibits NF-kappa-B pathway also by promoting the ubiquitination of TRAF2 (PubMed:22212761). Affects the assembly state and activity of the proteasome in the cells including neurons by ubiquitinating the proteasomal subunit PSMA2 via 'Lys-63'-linked polyubiquitin chains (By similarity). Promotes 'Lys-48'-linked polyubiquitination SIRT7, leading to the

hydrogen peroxide-induced cell death (PubMed:36646384).

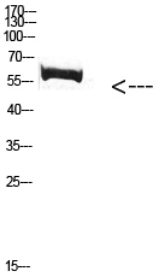
Cellular Location

Cytoplasm. Nucleus Mitochondrion. Cytoplasm, cytosol. Note=Predominantly cytoplasmic (PubMed:16096642). A minor proportion is detected in the nucleus (PubMed:16096642). Relocates from the cytosol to depolarized mitochondria (PubMed:23933751).

Background

Substrate recognition component of a SCF (SKP1-CUL1-F- box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins. Recognizes BIRC2 and DLGAP5. Plays a role downstream of PINK1 in the clearance of damaged mitochondria via selective autophagy (mitophagy) by targeting PRKN to dysfunctional depolarized mitochondria. Promotes MFN1 ubiquitination.

Images



Western Blot analysis of mouse-kidney cells using Antibody diluted at 1000. Secondary antibody was diluted at 1:20000