

FBXW7 / FBW7 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13601**Specification****FBXW7 / FBW7 Antibody (N-Terminus) - Product Information**

Application	IHC
Primary Accession	Q969H0
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80kDa KDa

FBXW7 / FBW7 Antibody (N-Terminus) - Additional Information**Gene ID** 55294**Other Names**

F-box/WD repeat-containing protein 7, Archipelago homolog, hAgo, F-box and WD-40 domain-containing protein 7, F-box protein FBX30, SEL-10, hCdc4, FBXW7 (HGNC:16712)

Target/Specificity

N terminus of the 69 kD isoform of the hCdc4 protein.

Reconstitution & Storage

+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions

FBXW7 / FBW7 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

FBXW7 / FBW7 Antibody (N-Terminus) - Protein Information**Name** FBXW7 ([HGNC:16712](#))**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 (PubMed:22748924, PubMed:34741373, PubMed:17434132, PubMed:26976582, PubMed:28727686, PubMed:35395208). Recognizes and binds phosphorylated sites/phosphodegrons within target proteins and thereafter brings them to the SCF complex for ubiquitination

(PubMed:22748924, PubMed:34741373, PubMed:26774286, PubMed:17434132, PubMed:26976582, PubMed:28727686). Identified substrates include cyclin-E (CCNE1 or CCNE2), DISC1, JUN, MYC, NOTCH1 released notch intracellular domain (NICD), NFE2L1, NOTCH2, MCL1, MLST8, RICTOR, and probably PSEN1 (PubMed:11565034, PubMed:12354302, PubMed:11585921, PubMed:15103331, PubMed:14739463, PubMed:17558397, PubMed:17873522, PubMed:22608923, PubMed:22748924, PubMed:29149593, PubMed:25775507, PubMed:28007894, PubMed:26976582, PubMed:28727686, PubMed:25897075, PubMed:34102342). Acts as a negative regulator of JNK signaling by binding to phosphorylated JUN and promoting its ubiquitination and subsequent degradation (PubMed:14739463). Involved in bone homeostasis and negative regulation of osteoclast differentiation (PubMed:29149593). Regulates the amplitude of the cyclic expression of hepatic core clock genes and genes involved in lipid and glucose metabolism via ubiquitination and proteasomal degradation of their transcriptional repressor NR1D1; CDK1-dependent phosphorylation of NR1D1 is necessary for SCF(FBXW7)-mediated ubiquitination (PubMed:27238018). Also able to promote 'Lys-63'-linked ubiquitination in response to DNA damage (PubMed:26774286). The SCF(FBXW7) complex facilitates double-strand break repair following phosphorylation by ATM: phosphorylation promotes localization to sites of double-strand breaks and 'Lys-63'-linked ubiquitination of phosphorylated XRCC4, enhancing DNA non-homologous end joining (PubMed:26774286).

Cellular Location

[Isoform 1]: Nucleus, nucleoplasm. Chromosome Note=Localizes to site of double-strand breaks following phosphorylation by ATM. [Isoform 3]: Nucleus, nucleolus

Tissue Location

[Isoform 1]: Widely expressed.

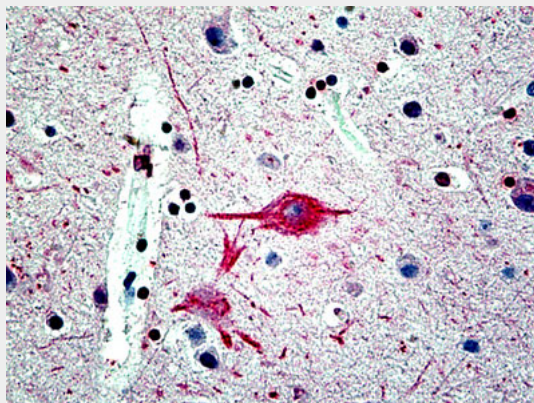
FBXW7 / FBW7 Antibody (N-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FBXW7 / FBW7 Antibody (N-Terminus) - Images



Anti-FBXW7 antibody IHC of human: brain.

FBXW7 / FBW7 Antibody (N-Terminus) - Background

Substrate recognition component of an SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins. Recognizes and binds phosphorylated sites/phosphodegrons within target proteins and thereafter bring them to the SCF complex for ubiquitination. Identified substrates include cyclin-E, MYC, NOTCH1 released notch intracellular domain (NICD), and probably PSEN1.

FBXW7 / FBW7 Antibody (N-Terminus) - References

- Winston J.T.,et al.Curr. Biol. 9:1180-1182(1999).
Moberg K.H.,et al.Nature 413:311-316(2001).
Strohmaier H.,et al.Nature 413:316-322(2001).
Li J.,et al.J. Neurochem. 82:1540-1548(2002).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).