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FBXL2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP5030b

Specification

FBXL2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9UKC9

FBXL2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 25827

Other Names
F-box/LRR-repeat protein 2, F-box and leucine-rich repeat protein 2 {ECO:0000312|HGNC:HGNC:13598}, F-box protein FBL2/FBL3 {ECO:0000303|PubMed:10945468, ECO:0000312|EMBL:AAF045101}, FBXL2 (HGNC:13598)

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.

FBXL2 Antibody (C-term) Blocking Peptide - Protein Information

Name FBXL2 {ECO:0000303|PubMed:22323446, ECO:0000312|HGNC:HGNC:13598}

Function
Calcium-activated substrate recognition component of the SCF (SKP1-cullin-F-box protein) E3 ubiquitin-protein ligase complex, SCF(FBXL2), which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:22020328, PubMed:22323446). Unlike many F-box proteins, FBXL2 does not seem to target phosphodegron within its substrates but rather calmodulin- binding motifs and is thereby antagonized by calmodulin (PubMed:22020328, PubMed:22323446). This is the case for the cyclins CCND2 and CCND3 which polyubiquitination and subsequent degradation are inhibited by calmodulin (PubMed:22020328, PubMed:22323446). Through CCND2 and CCND3 degradation induces cell-cycle arrest in G(0) (PubMed:<a href="http://www.uniprot.org/citations/22020328"

target="_blank">22020328, PubMed:22323446). SCF(FBXL2) also mediates PIK3R2 ubiquitination and proteasomal degradation thereby regulating phosphatidylinositol 3-kinase signaling and autophagy (PubMed:23604317). PCYT1A monoubiquitination by SCF(FBXL2) and subsequent degradation regulates synthesis of phosphatidylcholine, which is utilized for formation of membranes and of pulmonary surfactant (By similarity). The SCF(FBXL2) complex acts as a regulator of inflammation by mediating ubiquitination and degradation of TRAF proteins (TRAF1, TRAF2, TRAF3, TRAF4, TRAF5 and TRAF6) (By similarity). The SCF(FBXL2) complex acts as a negative regulator of the NLRP3 inflammasome by mediating ubiquitination and degradation of NLRP3 (PubMed:26037928).

Cellular Location
Membrane; Lipid- anchor

Tissue Location
Expressed in brain, heart, kidney, liver, lung, pancreas and placenta.

FBXL2 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

FBXL2 Antibody (C-term) Blocking Peptide - Images

FBXL2 Antibody (C-term) Blocking Peptide - Background

FBXL2 encodes a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbls class and, in addition to an F-box, contains 12 tandem leucine-rich repeats.

FBXL2 Antibody (C-term) Blocking Peptide - References

Ye, J. PLoS Pathog. 3 (8), E108 (2007) Ilyin, G.P., et al. Genomics 67(1):40-47(2000)Winston, J.T., et al. Curr. Biol. 9(20):1180-1182(1999)