abcam

ab227677

Anti-Fbxw7 antibody [SP237]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.6 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	SP237
Purification technique	Affinity purification Protein A/G
Purification notes	Purified from TCS by protein A/G.

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/400
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	Antigen retrieval: Boil tissue section in EDTA buffer, pH 8.0 for 10 minutes followed by cooling at room temperature for 20 minutes.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information FBXW7

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:17434132, PubMed:22748924, PubMed:26976582, PubMed:28727686, PubMed:34741373, PubMed:35395208). Recognizes and binds phosphorylated sites/phosphodegrons within target proteins and thereafter brings them to the SCF complex for ubiquitination (PubMed:17434132, PubMed:22748924, PubMed:26774286, PubMed:26976582, PubMed:28727686, PubMed:34741373). 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:11585921, PubMed:12354302, PubMed:14739463, PubMed:15103331, PubMed:17558397, PubMed:17873522, PubMed:22608923, PubMed:22748924, PubMed:25775507, PubMed:25897075, PubMed:26976582, PubMed:28007894, PubMed:28727686, PubMed:29149593, 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).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

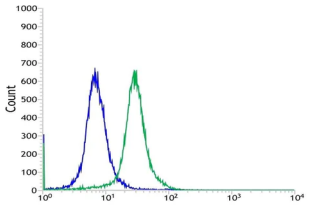
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

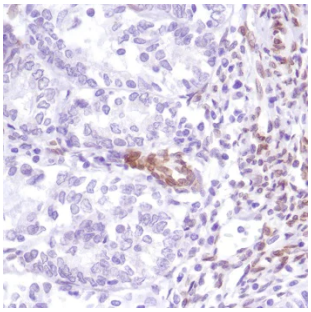
3 product images



Flow Cytometry (Intracellular) - Anti-Fbxw7 antibody [SP237] (ab227677)

Fbxw7 Flow Cytometry (Intracellular) staining using rabbit Anti-Fbxw7 antibody

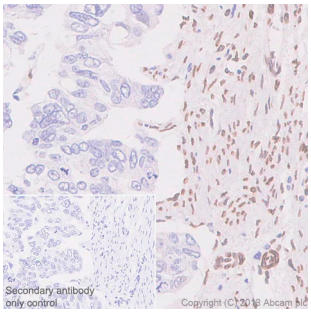
Flow cytometric analysis of HL-60 (human promyelocytic leukemia cell line) cell line labeling Fbxw7 with ab227677 at 1/400 (green) compared with a rabbit isotype control (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fbxw7 antibody [SP237] (ab227677)

Fbxw7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Fbxw7 antibody

Formalin-fixed, paraffin-embedded human endometrial adenocarcinoma tissue stained for Fbxw7 with ab227677 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fbxw7 antibody [SP237] (ab227677)

Fbxw7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Fbxw7 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human endometrial adenocarcinoma tissue sections labeling Fbxw7 with ab227677 at 1/100 dilution (1.56 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

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