

## Anti-F-box only protein 4 (FBX4) (RABBIT) Antibody - 100-401-963

**Code:** 100-401-963

**Size:** 100 µL

**Product Description:** Anti-F-box only protein 4 (FBX4) (RABBIT) Antibody - 100-401-963

**Concentration:** 85 mg/mL by Refractometry

**PhysicalState:** Liquid (sterile filtered)

<b>Label</b>	Unconjugated
<b>Host</b>	Rabbit
<b>Gene Name</b>	FBXO4
<b>Species Reactivity</b>	human, mouse
<b>Buffer</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Stabilizer</b>	None
<b>Preservative</b>	0.01% (w/v) Sodium Azide
<b>Storage Condition</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Synonyms</b>	rabbit anti-Anti-F-box only protein 4 antibody, rabbit anti-Fbx4 antibody, rabbit anti-FBXO4 antibody, F box protein 4 antibody, F box protein Fbx4 antibody, FBX4 antibody, FBXO 4 antibody, FLJ10141 antibody
<b>Application Note</b>	This antiserum has been tested for use in western blotting and immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 44 kDa in size by western blotting in the appropriate cell lysate or extract.
<b>Background</b>	Skp/Cullin/F-box (SCF) complexes are part of a large family of E3 ubiquitin ligases in which F-box proteins determine substrate specificity. Substrate selection by F-box proteins may also be aided by accessory cofactors. The F-box only protein 4, FBX4, interacts via its F-box with SKP1 and CUL1 to form SCFFBX4 ubiquitin ligase. The activity of the SCFFBX4 complex can be regulated by aB crystallin, a small heat shock protein which serves as a specificity cofactor for FBX4 dependent ubiquitination. FBX4 together with aB crystallin (SCFFBX4-aB crystallin) promotes the ubiquitination of cyclin D1 phosphorylated at Thr-286. In addition, the SCFFBX4-aB crystallin ubiquitin ligase has been implicated in the ubiquitination of unknown substrates in desmin-related myopathy. SCFFBX4, in the absence of aB crystallin, also ubiquitinates the telomeric protein PIN2/TRF1.
<b>Purity And Specificity</b>	This antiserum is directed against human and mouse FBX4. Reactivity against homologues from other sources is not known.
<b>Assay Dilutions</b>	ICC
<b>ELISA</b>	1:5,000 - 1:25,000
<b>Western Blot</b>	1:500 – 1:3000
<b>Other Assays</b>	ICC
<b>Expiration</b>	Expiration date is one (1) year from date of opening.
<b>Immunogen</b>	This whole rabbit serum was prepared by repeated immunizations with a synthetic peptide derived from sequences unique to the N-terminus of FBX4 and conserved between the human and murine proteins (see link below for the full-length sequence of the mouse gene product).
<b>General Reference</b>	Lin DI, Barbash O, Kumar KGS, Weber JD, Harper JW, Klein-Szanto AJP, Rustgi A, Fuchs SY, Diehl JA (2006) Phosphorylation-dependent ubiquitination of cyclin D1 by the SCFFBX4-aB crystallin complex. <i>Molecular Cell</i> . In press. Lee TH, Perrem K, Harper JW, Lu KP, Zhou XZ (2006) The F-box protein FBX4 targets PIN2/TRF1 for ubiquitin-mediated degradation and regulates telomere maintenance. <i>J. Biol. Chem.</i> 281(2): 759-768. den Engelsman J, Keijsers V, de Jong WW, Boelens WC (2003) The small heat-shock protein alpha B-crystallin promotes FBX4-dependent ubiquitination. <i>J. Biol. Chem.</i> 278(7): 4699-4704. Chiaur DS, Murthy S, Cenciarelli C, Parks W, Loda M, Inghirami G, Demetrick D, Pagano M (2000) Five human genes encoding F-box proteins: chromosome mapping and analysis in human tumors. <i>Cytogenet. Cell Genet.</i> 88(3-4): 255-258.
<b>Related Products</b>	

000-001-485

F-Box Protein 43 (Fbp5B) CONTROL PEPTIDE - 000-001-485

000-001-490	F-Box Protein Fbp5A CONTROL PEPTIDE - 000-001-490
100-401-160	Anti-cdc2 (p34) (RABBIT) Antibody - 100-401-160
100-401-963	Anti-F-box only protein 4 (FBX4) [RABBIT] Antibody - 100-401-963

## Related Links

NCBI - 256665259

<http://www.ncbi.nlm.nih.gov/protein/256665259>

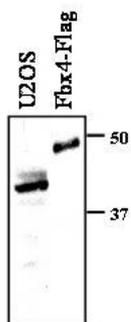
UniProtKB - Q8CHQ0

<http://www.uniprot.org/uniprot/Q8CHQ0>

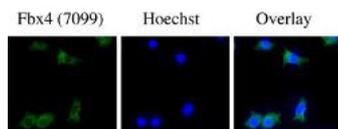
GeneID - 106052

## Images

- 1 Whole cell extracts prepared from U2OS cells, or insect Sf9 cells expressing Flag-FBX4, were resolved by SDS-PAGE and transferred to nitrocellulose. FBX4 was detected using Rockland's anti-FBX4 at a 1:500 dilution, in TBS buffer containing 0.1% Tween-20, followed by peroxidase conjugated anti-rabbit IgG. Personal Communication. A, Diehl, Univ. of Pennsylvania, Philadelphia, PA.



- 2 Immunocytochemistry staining of NIH-3T3 cells with Rockland's anti-FBX4. Cells were fixed in methanol/acetone followed by incubation with anti-FBX4 at a 1:300 dilution. Personal Communication. A, Diehl, Univ. of Pennsylvania, Philadelphia,



**Disclaimer**

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