

# Anti-F-Box Only Protein 9 (RABBIT) Antibody

F-Box Only Protein 9 Antibody Catalog # ASR5340

# Specification

# Anti-F-Box Only Protein 9 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, E, I, LCI This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Although the predicted MW of FBOX9 isoform 1 is 52 kDa, antibody reactivity against MCF7 whole cell lysates shows a predominant band at 100 kDa. This band is believed to be FBOX9 and the higher apparent MW may be due to its association with other proteins. Isoforms 1, 2 and 3 have reported molecular weights of 52.3, 51.1 and 47.3 kDa, respectively.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M
Immunogen	Sodium Chloride, pH 7.2 This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-Terminal region near amino acids 425-447 of human FBOX9 protein.
Preservative	0.01% (w/v) Sodium Azide

# Anti-F-Box Only Protein 9 (RABBIT) Antibody - Additional Information

Gene ID 26268

Other Names 26268

Purity

This affinity-purified antibody is directed against human FBOX9 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with FBOX9 protein from human, dog, rat and chimpanzee based on 100% homology with the immunizing sequence. Expect partial reactivity with homologues from zebrafish, bovine and mouse (94% homology) as well as chicken (88%) and Xenopus laevis (82%). Reactivity is expected against all known isoforms of this protein, as the immunogen sequence is



common to their carboxy-terminal ends. Reactivity against homologues from other sources is not known.

### Storage Condition

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.

#### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-F-Box Only Protein 9 (RABBIT) Antibody - Protein Information

Name FBXO9

Synonyms FBX9, VCIA1

### 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:<a

href="http://www.uniprot.org/citations/23263282" target="\_blank">23263282</a>, PubMed:<a href="http://www.uniprot.org/citations/34480022" target="\_blank">34480022</a>). Ubiquitinates mTORC1-bound TTI1 and TELO2 when they are phosphorylated by CK2 following growth factor deprivation, leading to their degradation. In contrast, does not mediate ubiquitination of TTI1 and TELO2 when they are part of the mTORC2 complex. As a consequence, mTORC1 is inactivated to restrain cell growth and protein translation, while mTORC2 is the activated due to the relief of feedback inhibition by mTORC1 (PubMed:<a href="http://www.uniprot.org/citations/23263282" target="\_blank">23263282</a>). Plays a role in maintaining epithelial cell survival by regulating the turn- over of chromatin modulator PRMT4 through ubiquitination and degradation by the proteasomal pathway (PubMed:<a href="http://www.uniprot.org/citations/34480022" target="\_blank">34480022</a>). Regulates also PPARgamma stability by facilitating PPARgamma/PPARG ubiquitination and thereby plays a role in adipocyte differentiation (By similarity).

Cellular Location Cytoplasm.

## Anti-F-Box Only Protein 9 (RABBIT) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-F-Box Only Protein 9 (RABBIT) Antibody - Images





Western blot using Rockland's affinity purified anti-FBOX9 antibody shows detection of a band at ~100 kDa (arrowhead) believed to correspond to FBOX9 present in a MCF7 whole cell lysate (p/n W09-000-360). Specific band reactivity is greatly diminished when the antibody is pre-incubated with the immunizing peptide (data not shown). Approximately 35 µg of lysate was separated by 4-20% Tris Glycine SDS-PAGE. After blocking, the membrane was probed overnight at 4°C with the primary antibody diluted to 1:1,500. The membrane was washed and reacted with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] (p/n 611-132-122) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers (indicated at left, 700 nm channel, red). IRDye800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

# Anti-F-Box Only Protein 9 (RABBIT) Antibody - Background

F-box only protein 9 (also called FBOX9 and Fbp9) is 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 the 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 Fbxs class. Anti-F-Box 9 Antibody is useful for researchers interested in Multiple Myeloma and Epilepsy, as well as the immune system and Ubiquitin pathway research.