

FBXO9 (C-14): sc-242808

BACKGROUND

F-box proteins are critical components of the SCF (skp1-CUL-1-F-box protein) type E3 ubiquitin ligase complex and are involved in substrate recognition and recruitment for ubiquitination. They are members of a larger family of proteins that are involved in the regulation of a wide variety of cellular processes (including the cell cycle, immune responses, signaling cascades and developmental events) through the targeting of proteins, such as cyclins, cyclin-dependent kinase inhibitors, I κ B- α and β -catenin, for proteasomal degradation. FBXO9 (F-box only protein 9), also known as FBX9, VCIA1 or NY-REN-57, is a 447 amino acid protein belonging to the F-box protein family. Containing an F-box domain and a TPR repeat, FBXO9 directly interacts with Skp1 p19 and CUL-1. FBXO9 is a substrate-recognition component of the SCF (SKP1-CUL1-F-box protein)-type E3 ubiquitin ligase complex. As a result of alternative splicing events, three isoforms of FBXO9 are produced.

REFERENCES

1. Erhardt, J.A., et al. 1998. A novel F-box protein, NFB42, is highly enriched in neurons and induces growth arrest. *J. Biol. Chem.* 273: 35222-35227.
2. Cenciarelli, C., et al. 1999. Identification of a family of human F-box proteins. *Curr. Biol.* 9: 1177-1179.
3. Winston, J.T., et al. 1999. A family of mammalian F-box proteins. *Curr. Biol.* 9: 1180-1182.
4. Ilyin, G.P., et al. 2002. A new subfamily of structurally related human F-box proteins. *Gene* 296: 11-20.
5. Yoshida, Y., et al. 2002. E3 ubiquitin ligase that recognizes sugar chains. *Nature* 418: 438-442.
6. Eom, C.Y. and Lehman, I.R. 2003. Replication-initiator protein (UL9) of the herpes simplex virus 1 binds NFB42 and is degraded via the ubiquitin-proteasome pathway. *Proc. Natl. Acad. Sci. USA* 100: 9803-9807.
7. Suzuki, T., et al. 2006. Mutation analyses of genes on 6p12-p11 in patients with juvenile myoclonic epilepsy. *Neurosci. Lett.* 405: 126-131.

CHROMOSOMAL LOCATION

Genetic locus: FBXO9 (human) mapping to 6p12.1; Fbxo9 (mouse) mapping to 9 E1.

SOURCE

FBXO9 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of FBXO9 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242808 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

FBXO9 (C-14) is recommended for detection of FBXO9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with FBXO family members.

FBXO9 (C-14) is also recommended for detection of FBXO9 in additional species, including canine, porcine and avian.

Suitable for use as control antibody for FBXO9 siRNA (h): sc-95076, FBXO9 siRNA (m): sc-145135, FBXO9 shRNA Plasmid (h): sc-95076-SH, FBXO9 shRNA Plasmid (m): sc-145135-SH, FBXO9 shRNA (h) Lentiviral Particles: sc-95076-V and FBXO9 shRNA (m) Lentiviral Particles: sc-145135-V.

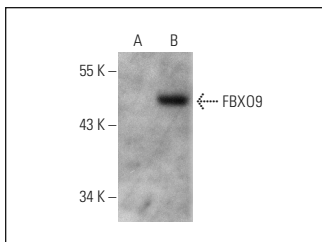
Molecular Weight of FBXO9: 52 kDa.

Positive Controls: FBXO9 (m): 293T Lysate: sc-120223.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FBXO9 (C-14): sc-242808. Western blot analysis of FBXO9 expression in non-transfected: sc-117752 (A) and mouse FBXO9 transfected: sc-120223 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.