

FBXO25 (F9-3): sc-100735

BACKGROUND

FBXO25 (F-box only protein 25), also known as FBX25, is a 367 amino acid protein that contains one C-terminal F-box domain and belongs to the FBX class of the F-box family of proteins. 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 response, signaling cascades and developmental processes) through the targeting of proteins, such as cyclins, cyclin-dependent kinase inhibitors, I κ B- α and β -catenin, for degradation by the proteasome after ubiquitination. Expressed at high levels in brain, FBXO25 localizes predominantly to the nucleus and directly interacts with Skp1 p19 and CUL-1. Disruption of the gene encoding FBXO25 can lead to X-linked mental retardation.

REFERENCES

- Cenciarelli, C., et al. 1999. Identification of a family of human F-box proteins. *Curr. Biol.* 9: 1177-1179.
- Winston, J.T., et al. 1999. A family of mammalian F-box proteins. *Curr. Biol.* 9: 1180-1182.
- Jin, J., et al. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. *Genes Dev.* 18: 2573-2580.
- Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 609098. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Hagens, O., et al. 2006. Characterization of FBX25, encoding a novel brain-expressed F-box protein. *Biochim. Biophys. Acta* 1760: 110-118.
- Maragno, A.L., et al. 2006. FBXO25, an F-box protein homologue of atrogen-1, is not induced in atrophying muscle. *Biochim. Biophys. Acta* 1760: 966-972.
- Manfiolli, A.O., et al. 2008. FBXO25-associated nuclear domains: a novel subnuclear structure. *Mol. Biol. Cell* 19: 1848-1861.

CHROMOSOMAL LOCATION

Genetic locus: FBXO25 (human) mapping to 8p23.3.

SOURCE

FBXO25 (F9-3) is a mouse monoclonal antibody raised against recombinant FBXO25 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

FBXO25 (F9-3) is recommended for detection of FBXO25 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FBXO2 siRNA (h): sc-75008, FBXO2 shRNA Plasmid (h): sc-75008-SH and FBXO2 shRNA (h) Lentiviral Particles: sc-75008-V.

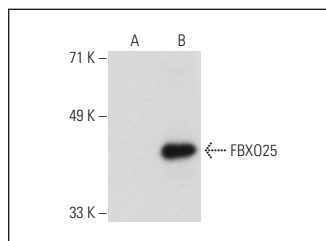
Molecular Weight of FBXO25: 42 kDa.

Positive Controls: FBXO25 (h): 293T lysate: sc-116139 or COLO 320 HSR whole cell lysate.

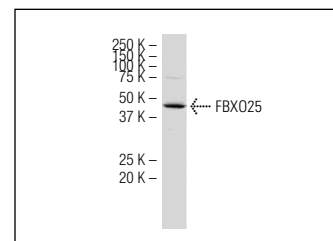
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



FBXO25 (F9-3): sc-100735. Western blot analysis of FBXO25 expression in non-transfected: sc-117752 (A) and human FBXO25 transfected: sc-116139 (B) 293T whole cell lysates.



FBXO25 (F9-3): sc-100735. Western blot analysis of FBXO25 expression in COLO 320 HSR whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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