

FBXO25 (D-14): sc-87737

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

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- 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.
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CHROMOSOMAL LOCATION

Genetic locus: FBXO25 (human) mapping to 8p23.3; Fbxo25 (mouse) mapping to 8 A1.1.

SOURCE

FBXO25 (D-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FBXO25 of human origin.

PRODUCT

Each vial contains 100 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-87737 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FBXO25 (D-14) is recommended for detection of FBXO25 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 other FBXO family members.

FBXO25 (D-14) is also recommended for detection of FBXO25 in additional species, including avian.

Suitable for use as control antibody for FBXO25 siRNA (h): sc-77570, FBXO25 siRNA (m): sc-145112, FBXO25 shRNA Plasmid (h): sc-77570-SH, FBXO25 shRNA Plasmid (m): sc-145112-SH, FBXO25 shRNA (h) Lentiviral Particles: sc-77570-V and FBXO25 shRNA (m) Lentiviral Particles: sc-145112-V.

Molecular Weight of FBXO25: 42 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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


 MONOS
 Satisfaction
 Guaranteed

Try **FBXO25 (G-5): sc-390219** or **FBXO25 (F9-3): sc-100735**, our highly recommended monoclonal alternatives to FBXO25 (D-14).