

FBXO25 (G-5): sc-390219

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, 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.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609098. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Jin, J., et al. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. *Genes Dev.* 18: 2573-2580.
- Hagens, O., et al. 2006. Characterization of FBX25, encoding a novel brain-expressed F-box protein. *Biochim. Biophys. Acta* 1760: 110-118.

CHROMOSOMAL LOCATION

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

SOURCE

FBXO25 (G-5) is a mouse monoclonal antibody raised against amino acids 316-363 mapping near the C-terminus of FBXO25 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FBXO25 (G-5) is available conjugated to agarose (sc-390219 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390219 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390219 PE), fluorescein (sc-390219 FITC), Alexa Fluor® 488 (sc-390219 AF488), Alexa Fluor® 546 (sc-390219 AF546), Alexa Fluor® 594 (sc-390219 AF594) or Alexa Fluor® 647 (sc-390219 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390219 AF680) or Alexa Fluor® 790 (sc-390219 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FBXO25 (G-5) is recommended for detection of FBXO25 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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

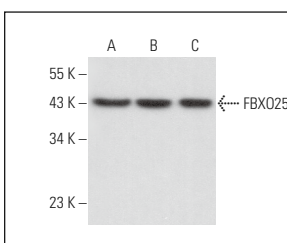
Molecular Weight of FBXO25: 42 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or T98G cell lysate: sc-2294.

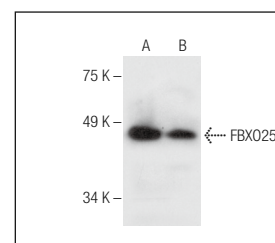
RECOMMENDED SUPPORT REAGENTS

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, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FBXO25 (G-5): sc-390219. Western blot analysis of FBXO25 expression in T98G (A), Jurkat (B) and Hep G2 (C) whole cell lysates.



FBXO25 (G-5): sc-390219. Western blot analysis of FBXO25 expression in COLO 320HRS (A) and T98G (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Jiang, G.Y., et al. 2016. FBXO25 promotes cell proliferation, invasion, and migration of NSCLC. *Tumour Biol.* 37: 14311-14319.

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.