FBXO2 (m): 293T Lysate: sc-125331



The Power to Question

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, $I\kappa B-\alpha$ and β -catenin, for proteasomal degradation. FBXO2 (F-box protein 2), also known as FBX2, FBG1 or NFB42, is a 296 amino acid protein that contains one F-box domain and one F-box associated domain. Functioning as a component of the SCF complex, FBXO2 is thought to recognize and bind to select phosphorylated proteins, thereby promoting their ubiquitination and subsequent degradation.

REFERENCES

- Erhardt, J.A., Hynicka, W., DiBenedetto, A., Shen, N., Stone, N., Paulson, H. and Pittman, R.N. 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., Chiaur, D.S., Guardavaccaro, D., Parks, W., Vidal, M. and Pagano, M. 1999. Identification of a family of human F-box proteins. Curr. Biol. 9: 1177-1179.
- 3. Winston, J.T., Koepp, D.M., Zhu, C., Elledge, S.J. and Harper, J.W. 1999. A family of mammalian F-box proteins. Curr. Biol. 9: 1180-1182.
- 4. Ilyin, G.P., Sérandour, A.L., Pigeon, C., Rialland, M., Glaise, D. and Guguen-Guillouzo, C. 2002. A new subfamily of structurally related human F-box proteins. Gene 296: 11-20.
- Yoshida, Y., Chiba, T., Tokunaga, F., Kawasaki, H., Iwai, K., Suzuki, T., Ito, Y., Matsuoka, K., Yoshida, M., Tanaka, K. and Tai, T. 2002. E3 ubiquitin ligase that recognizes sugar chains. Nature 418: 438-442.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607112. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 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.

CHROMOSOMAL LOCATION

Genetic locus: Fbxo2 (mouse) mapping to 4 E2.

PRODUCT

FBX02 (m): 293T Lysate represents a lysate of mouse FBX02 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

FBX02 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive FBX02 antibodies.

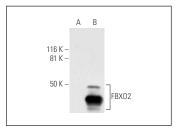
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FBX02 (A-12): sc-393873 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse FBX02 expression in FBX02 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



FBXO2 (A-12): sc-393873. Western blot analysis of FBXO2 expression in non-transfected: sc-117752 (A) and mouse FBXO2 transfected: sc-125331 (B) 293T whole rell lysates

PROTOCOLS

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