



FBXO44 (E-17): sc-101871

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, κ B- α and β -catenin, for proteasomal degradation. FBXO44 (F-box only protein 44), also known as FBG3, FBX30, FBX44, FBX6A or FBXO6A, is a 255 amino acid protein that contains one F-box domain and one FBA domain and functions as a component of the SCF complex. Expressed abundantly in kidney and brain and at lower levels in liver, heart and spleen, FBXO44 exists as multiple alternatively spliced isoforms and is thought to be involved in E3 ubiquitin ligase-related events throughout the cell.

REFERENCES

- 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.
- Winston, J.T., Koepf, D.M., Zhu, C., Elledge, S.J. and Harper, J.W. 1999. A family of mammalian F-box proteins. *Curr. Biol.* 9: 1180-1182.
- Ilyin, G.P., Rialland, M., Pigeon, C. and Guguen-Guillouzo, C. 2000. cDNA cloning and expression analysis of new members of the mammalian F-box protein family. *Genomics.* 67: 40-47.
- Ilyin, G.P., Serandour, 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.
- Jin, J., Cardozo, T., Lovering, R.C., Elledge, S.J., Pagano, M. and Harper, J.W. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. *Genes Dev.* 18: 2573-2580.
- Cardozo, T. and Pagano, M. 2004. The SCF ubiquitin ligase: insights into a molecular machine. *Nat. Rev. Mol. Cell Biol.* 5: 739-751.
- Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 609111. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Glenn, K.A., Nelson, R.F., Wen, H.M., Mallinger, A.J. and Paulson, H.L. 2008. Diversity in tissue expression, substrate binding, and SCF complex formation for a lectin family of ubiquitin ligases. *J. Biol. Chem.* 283: 12717-12729.

CHROMOSOMAL LOCATION

Genetic locus: FBXO44 (human) mapping to 1p36.22.

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.

SOURCE

FBXO44 (E-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FBXO44 of human origin.

PRODUCT

Each vial contains 100 μ g of IgG in PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FBXO44 (E-17) is recommended for detection of FBXO44 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FBXO44 siRNA (h): sc-78647, FBXO44 shRNA Plasmid (h): sc-78647-SH and FBXO44 shRNA (h) Lentiviral Particles: sc-78647-V.

Molecular Weight of FBXO44: 30 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.

PROTOCOLS

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