# FBXO6 (S-17): sc-101870



The Power to Question

#### **BACKGROUND**

In eukaryotes, degradation of damaged or excess proteins into short peptides is carried out by proteasomes. The proteasomes bind polyubiquitin chains that are added to the target proteins through a phosphorylation-dependent reaction catalyzed by ubiquitin ligases, such as the SCF-type E3 complex containing Skp, Cullin, Rbx1 and F-box proteins. F-box proteins, such as FBX06 (F-box only protein 6), possess structural motifs used for directly aggregating the substrate while binding to the Skp1 bridge providing for close proximity to the functional E2 ubiquitin-conjugating enzyme, Cullin/Rbx1. FBX06, also known as FBG2 or FBX6, is a 293 amino acid protein that contains a 40 amino acid binding motif. Human FBX06 shows significant sequence identity to rat NFB42, a protein related to cell cycle control. High expression of FBX06 is known in brain, skeletal muscle, spleen, liver and testis.

# **REFERENCES**

- 1. 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., 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.
- 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.
- 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: FBX06 (human) mapping to 1p36.22.

# SOURCE

FBX06 (S-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of FBX06 of human origin.

#### **STORAGE**

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

## **PROTOCOLS**

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

#### **PRODUCT**

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

## **APPLICATIONS**

FBX06 (S-17) is recommended for detection of FBX06 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 FBX06 siRNA (h): sc-88674, FBX06 shRNA Plasmid (h): sc-88674-SH and FBX06 shRNA (h) Lentiviral Particles: sc-88674-V.

Molecular Weight of FBX06: 34 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.

## **RESEARCH USE**

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com