SANTA CRUZ BIOTECHNOLOGY, INC.

FBXO27 (K-13): sc-101873

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 FBXO27 (F-box only protein 27), 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. FBXO27, also known as FBG5 and FBX27, is a 283 amino acid protein that contains an N-terminal F-box and a C-terminal F-box-associated domain. FBXO27 found highly expressed in brain, heart and kidney with lower levels found in kidney and liver.

REFERENCES

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2. 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.
3. Craig, K.L. and Tyers, M. 1999. The F-box: a new motif for ubiquitin dependent proteolysis in cell cycle regulation and signal transduction. Prog. Biophys. Mol. Biol. 72: 299-328.
4. 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.
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6. 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: FBXO27 (human) mapping to 19q13.2.

SOURCE

FBXO27 (K-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FBXO27 of human origin.

PRODUCT

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

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.

APPLICATIONS

FBXO27 (K-13) is recommended for detection of FBXO27 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 FBXO27 siRNA (h): sc-97884, FBXO27 shRNA Plasmid (h): sc-97884-SH and FBXO27 shRNA (h) Lentiviral Particles: sc-97884-V.

Molecular Weight of FBXO27: 32 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.