

FBL11 (N-21): sc-130585

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 protein recruitment. F-box proteins are members of a large family that regulate the cell cycle, immune response, signaling cascades and developmental programs by targeting proteins, such as cyclins, for degradation by the proteasome after ubiquitination. FBL11, also known as FBXL11 (F-box and leucine-rich repeat protein 11), CXXC8, KDM2A, JHDM1A (JmjC domain-containing histone demethylation protein 1A) or LILINA, is a 1,162 amino acid member of the F-box protein family that contains one F-box domain and localizes to the nucleus. Expressed ubiquitously with highest expression in testis, ovary and brain, FBL11 functions to demethylate the Lys-36 residue of histone H3, thereby modulating the histone code. Additionally, FBL11 is thought to promote the ubiquitination and subsequent degradation of various phosphorylated proteins. Three isoforms of FBL11 exist due to alternative splicing events.

REFERENCES

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2. Nagase, T., et al. 1999. Prediction of the coding sequences of unidentified human genes. XIII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 6: 63-70.
3. Ilyin, G.P., et al. 2000. cDNA cloning and expression analysis of new members of the mammalian F-box protein family. *Genomics* 67: 40-47.
4. Jin, J., et al. 2004. Systematic analysis and nomenclature of mammalian F-box proteins. *Genes Dev.* 18: 2573-2580.
5. Tsukada, Y., et al. 2006. Histone demethylation by a family of JmjC domain-containing proteins. *Nature* 439: 811-816.
6. Frescas, D., et al. 2007. JHDM1B/FBXL10 is a nucleolar protein that represses transcription of ribosomal RNA genes. *Nature* 450: 309-313.
7. Pfau, R., et al. 2008. Members of a family of JmjC domain-containing oncoproteins immortalize embryonic fibroblasts via a JmjC domain-dependent process. *Proc. Natl. Acad. Sci. USA* 105: 1907-1912.

CHROMOSOMAL LOCATION

Genetic locus: KDM2A (human) mapping to 11q13.2.

SOURCE

FBL11 (N-21) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of FBL11 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml 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.

APPLICATIONS

FBL11 (N-21) is recommended for detection of FBL11 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).

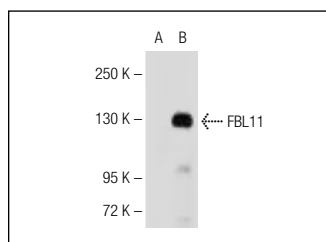
Suitable for use as control antibody for FBL11 siRNA (h): sc-96991, FBL11 shRNA Plasmid (h): sc-96991-SH and FBL11 shRNA (h) Lentiviral Particles: sc-96991-V.

Molecular Weight of FBL11 isoforms: 133/97/90 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.

DATA



FBL11 (N-21): sc-130585. Western blot analysis of FBL11 expression in non-transfected (A) and human FBL11 transfected (B) 293 whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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