

# FBL11 (H-120): sc-135126

## 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

1. Winston, J.T., et al. 1999. A family of mammalian F-box proteins. *Curr. Biol.* 9: 1180-1182.
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; Kdm2a (mouse) mapping to 19 A.

## SOURCE

FBL11 (H-120) is a rabbit polyclonal antibody raised against amino acids 351-470 mapping within an internal region of FBL11 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of 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 (H-120) is recommended for detection of FBL11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FBL11 (H-120) is also recommended for detection of FBL11 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FBL11 siRNA (h): sc-96991, FBL11 siRNA (m): sc-145085, FBL11 shRNA Plasmid (h): sc-96991-SH, FBL11 shRNA Plasmid (m): sc-145085-SH, FBL11 shRNA (h) Lentiviral Particles: sc-96991-V and FBL11 shRNA (m) Lentiviral Particles: sc-145085-V.

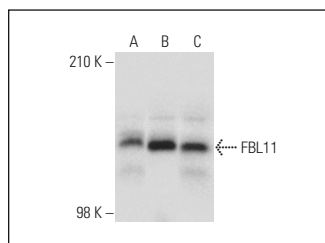
Molecular Weight of FBL11 isoforms: 133/97/90 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, SH-SY5Y nuclear extract or IMR-32 nuclear extract: sc-2148.

## 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



FBL11 (H-120): sc-135126. Western blot analysis of FBL11 expression in HeLa (A), IMR-32 (B) and SH-SY5Y (C) nuclear extracts.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.