# SANTA CRUZ BIOTECHNOLOGY, INC.

# FTSJD2 (L-14): sc-161774



# BACKGROUND

Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6. The FTSJD2 protein is encoded by the FTSJD2 (FtsJ methyltransferase domain containing 2) gene, which maps to human chromosome 6p21.2.

## REFERENCES

- 1. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. Nature 425: 805-811.
- Vuoristo, M.M., et al. 2004. A stop codon mutation in COL11A2 induces exon skipping and leads to non-ocular Stickler syndrome. Am. J. Med. Genet. A 130: 160-164.
- McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
- Batts, K.P. 2007. Iron overload syndromes and the liver. Mod. Pathol. 20: S31-S39.
- Olsson, K.S., et al. 2007. The HLA-A1-B8 haplotype hitchhiking with the hemochromatosis mutation: does it affect the phenotype? Eur. J. Haematol. 79: 429-434.
- 6. Park, E., et al. 2007. Modulation of Parkin gene expression in noradrenergic neuronal cells. Int. J. Dev. Neurosci. 25: 491-497.

#### CHROMOSOMAL LOCATION

Genetic locus: FTSJD2 (human) mapping to 6p21.2; Ftsjd2 (mouse) mapping to 17 A3.3.

## SOURCE

FTSJD2 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FTSJD2 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161774 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

FTSJD2 (L-14) is recommended for detection of FTSJD2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with FTSJD1.

FTSJD2 (L-14) is also recommended for detection of FTSJD2 in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for FTSJD2 siRNA (h): sc-95433, FTSJD2 siRNA (m): sc-146438, FTSJD2 shRNA Plasmid (h): sc-95433-SH, FTSJD2 shRNA Plasmid (m): sc-146438-SH, FTSJD2 shRNA (h) Lentiviral Particles: sc-95433-V and FTSJD2 shRNA (m) Lentiviral Particles: sc-146438-V.

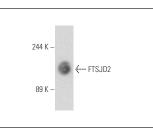
Molecular Weight of FTSJD2: 95 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.





FTSJD2 (L-14): sc-161774. Western blot analysis of FTSJD2 expression in HeLa whole cell lysate.

### **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.

#### PROTOCOLS

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