## SANTA CRUZ BIOTECHNOLOGY, INC.

# FRMD1 (C-18): sc-246965



BACKGROUND

FERM domains are roughly 150 amino acids in length and are found in a number of cytoskeletal-associated proteins such as ezrin, radixin, moesin and 4.1 (erythrocyte membrane protein band 4.1), where they provide a link between cytoskeletal signals and membrane dynamics. FRMD1 (FERM domain-containing protein 1) is a 549 amino acid protein containing one FERM domain. The gene encoding FRMD1 maps to human chromosome 6q27. 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. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6.

## REFERENCES

- 1. Zneimer, S.M., et al. 1991. Regional assignment of two genes of the human branched-chain  $\alpha$ -keto acid dehydrogenase complex: the E1  $\beta$  gene (BCKDHB) to chromosome 6p21-22 and the E2 gene (DBT) to chromosome 1p31. Genomics 10: 740-747.
- 2. 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 130A: 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.
- Safadi, S.S., et al. 2007. A disease state mutation unfolds the parkin ubiquitin-like domain. Biochemistry 46: 14162-14169.
- Park, E., et al. 2007. Modulation of parkin gene expression in noradrenergic neuronal cells. Int. J. Dev. Neurosci. 25: 491-497.
- Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. Genes Chromosomes Cancer 47: 159-164.

## CHROMOSOMAL LOCATION

Genetic locus: FRMD1 (human) mapping to 6q27.

#### SOURCE

FRMD1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FRMD1 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-246965 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

FRMD1 (C-18) is recommended for detection of FRMD1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 other FRMD family members.

Suitable for use as control antibody for FRMD1 siRNA (h): sc-95103, FRMD1 shRNA Plasmid (h): sc-95103-SH and FRMD1 shRNA (h) Lentiviral Particles: sc-95103-V.

Molecular Weight of FRMD1: 63 kDa.

#### **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) Immunofluo-rescence: 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.

## **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.