# SANTA CRUZ BIOTECHNOLOGY, INC.

# IFFO2 (C-16): sc-243057



The Power to Question

# BACKGROUND

IFF02 (intermediate filament family orphan 2) is 517 amino acid protein that is encoded by a gene mapping to human chromosome 1p36.13 and mouse chromosome 4 D3. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

- Dobbie, Z., Heinimann, K., Bishop, D.T., Müller, H. and Scott, R.J. 1997. Identification of a modifier gene locus on chromosome 1p35-36 in familial adenomatous polyposis. Hum. Genet. 99: 653-657.
- Eudy, J.D., Yao, S., Weston, M.D., Ma-Edmonds, M., Talmadge, C.B., Cheng, J.J., Kimberling, W.J. and Sumegi, J. 1998. Isolation of a gene encoding a novel member of the nuclear receptor superfamily from the critical region of Usher syndrome type IIa at 1q41. Genomics 50: 382-384.
- Eudy, J.D., Weston, M.D., Yao, S., Hoover, D.M., Rehm, H.L., Yan, D., Ahmad, I., Cheng, J.J., Ayuso, C., Cremers, C., Moller, C., Beisel, K.W., Tamayo, M., Morton, C.C., Swaroop, A., Kimberling, W.J. and Sumegi, J. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIa. Science 280: 1753-1757.
- 4. Lau, E.K., Tayebi, N., Ingraham, L.J., Winfield, S.L., Koprivica, V., Stone, D.L., Zimran, A., Ginns, E.I. and Sidransky, E. 1999. Two novel polymorphic sequences in the glucocerebrosidase gene region enhance mutational screening and founder effect studies of patients with Gaucher disease. Hum. Genet. 104: 293-300.
- 5. Bowling, E.L., Brown, M.D. and Trundle, T.V. 2000. The Stickler syndrome: case reports and literature review. Optometry 71: 177-182.
- Tayebi, N., Callahan, M., Madike, V., Stubblefield, B.K., Orvisky, E., Fillano, J.J. Krasnewich, D. and Sidransky, E. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.
- Plasilova, M., Russell, A.M., Wanner, A., Wolf, A., Dobbie, Z., Müller, H.J. and Heinimann, K. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
- Betarbet, R., Anderson, L.R., Gearing, M., Hodges, T.R., Fritz, J.J., Lah, J.J. and Levey, A.I. 2008. Fas-associated factor 1 and Parkinson's disease. Neurobiol. Dis. 31: 309-315.

#### CHROMOSOMAL LOCATION

Genetic locus: IFFO2 (human) mapping to 1p36.13; Iffo2 (mouse) mapping to 4 D3.

#### **RESEARCH USE**

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

#### SOURCE

IFFO2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IFFO2 of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-243057 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

IFF02 (C-16) is recommended for detection of IFF02 of mouse, rat and 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).

IFF02 (C-16) is also recommended for detection of IFF02 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for IFF02 siRNA (m): sc-141931, IFF02 shRNA Plasmid (m): sc-141931-SH and IFF02 shRNA (m) Lentiviral Particles: sc-141931-V.

Molecular Weight of IFF02: 57 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.

#### **PROTOCOLS**

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