# SANTA CRUZ BIOTECHNOLOGY, INC.

# FUNDC2 (G-12): sc-167931



# BACKGROUND

FUNDC2 (FUN14 domain-containing protein 2), also known as HCC-3 (cervical cancer proto-oncogene 3 protein), HCBP6 (hepatitis C virus core-binding protein 6) or DC44, is a 189 amino acid protein belonging to the FUN14 family. The gene encoding FUNDC2 maps to human chromosome Xq28. The X and Y chromosomes are the human sex chromosomes. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. The combination of an X and Y chromosome lead to normal male development while two copies of X lead to normal female development. More than one copy of the X chromosome with a Y chromosome causes Klinefelter's syndrome. A single copy of X alone leads to Turner's syndrome. More than two copies of the X chromosome, in the absence of a Y chromosome, is known as Triple X syndrome. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

## REFERENCES

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- 4. Muntoni, F., et al. 2003. Dystrophin and mutations: one gene, several proteins, multiple phenotypes. Lancet Neurol. 2: 731-740.
- Deeb, S.S. 2005. The molecular basis of variation in human color vision. Clin. Genet. 67: 369-377.
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## CHROMOSOMAL LOCATION

Genetic locus: FUNDC2 (human) mapping to Xq28; Fundc2 (mouse) mapping to X A7.3.

#### SOURCE

FUNDC2 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FUNDC2 of mouse 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-167931 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

FUNDC2 (G-12) is recommended for detection of FUNDC2 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); non cross-reactive with FUNDC1.

FUNDC2 (G-12) is also recommended for detection of FUNDC2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FUNDC2 siRNA (h): sc-90945, FUNDC2 siRNA (m): sc-145274, FUNDC2 shRNA Plasmid (h): sc-90945-SH, FUNDC2 shRNA Plasmid (m): sc-145274-SH, FUNDC2 shRNA (h) Lentiviral Particles: sc-90945-V and FUNDC2 shRNA (m) Lentiviral Particles: sc-145274-V.

Molecular Weight of FUNDC2: 21 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.

MONOS Satisfation Guaranteed

Try **FUNDC2 (2G12): sc-517152**, our highly recommended monoclonal alternative to FUNDC2 (G-12).