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


CHROMOSOMAL LOCATION

Genetic locus: FUNDC2 (human) mapping to Xq28.

SOURCE

FUNDC2 (2G12) is a mouse monoclonal antibody raised against amino acids 1-100 representing partial length FUNDC2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FUNDC2 (2G12) is recommended for detection of FUNDC2 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Molecular Weight of FUNDC2: 21 kDa.


RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA

FUNDC2 (2G12); sc-517152. Western blot analysis of FUNDC2 expression in human kidney tissue extract.

FUNDC2 (2G12); sc-517152. Western blot analysis of human recombinant FUNDC2 fusion protein.

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 for detailed protocols and support products.