

# FEM1C (A-14): sc-167886

## BACKGROUND

The FEM proteins are components of a novel signal transduction pathway and are required for male sexual development in the nematode *C. elegans*. FEM1C (*fem-1* homolog c (*C. elegans*)), also known as FEM1- $\gamma$ , is a 617 amino acid protein that is thought to exist as a component of the E3 ubiquitin-protein ligase complex. Localized to the cytoplasm, FEM1C is widely expressed but is found at highest levels in testis, skeletal muscle, cardiac tissue and kidney. FEM1C belongs to the FEM-1 family and contains nine ANK repeats and two TPR repeats. The gene encoding FEM1C maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

1. Krakow, D., et al. 2001. Identification of human FEM1A, the ortholog of a *C. elegans* sex-differentiation gene. *Gene* 279: 213-219.
2. Ventura-Holman, T., et al. 2003. The Fem1c genes: conserved members of the Fem1 gene family in vertebrates. *Gene* 314: 133-139.
3. Sjöblom, T., et al. 2006. The consensus coding sequences of human breast and colorectal cancers. *Science* 314: 268-274.
4. Goodarzi, M.O., et al. 2008. FEM1A and FEM1B: novel candidate genes for polycystic ovary syndrome. *Hum. Reprod.* 23: 2842-2849.
5. Vera-Carbonell, A., et al. 2009. Characterization of a *de novo* complex chromosomal rearrangement in a patient with cri-du-chat and trisomy 5p syndromes. *Am. J. Med. Genet. A* 149A: 2513-2521.
6. Ravandi, F., et al. 2009. Superior outcome with hypomethylating therapy in patients with acute myeloid leukemia and high-risk myelodysplastic syndrome and chromosome 5 and 7 abnormalities. *Cancer* 115: 5746-5751.
7. Sazawal, S., et al. 2009. Haematological & molecular profile of acute myelogenous leukaemia in India. *Indian J. Med. Res.* 129: 256-261.

## CHROMOSOMAL LOCATION

Genetic locus: FEM1C (human) mapping to 5q22.3; Fem1c (mouse) mapping to 18 C.

## SOURCE

FEM1C (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FEM1C 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-167886 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

FEM1C (A-14) is recommended for detection of FEM1C 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 FEM1A or FEM1B.

FEM1C (A-14) is also recommended for detection of FEM1C in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FEM1C siRNA (h): sc-91928, FEM1C siRNA (m): sc-145157, FEM1C shRNA Plasmid (h): sc-91928-SH, FEM1C shRNA Plasmid (m): sc-145157-SH, FEM1C shRNA (h) Lentiviral Particles: sc-91928-V and FEM1C shRNA (m) Lentiviral Particles: sc-145157-V.

Molecular Weight of FEM1C: 69 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.