

FAM70A (F-6): sc-514863

BACKGROUND

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. There are a number of conditions related to an unusual number and combination of sex chromosomes being inherited. 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. The FAM70A gene product has been provisionally designated FAM70A pending further characterization.

REFERENCES

1. Givens, J.R., et al. 1975. Features of Turner's syndrome in women with polycystic ovaries. *Obstet. Gynecol.* 45: 619-624.
2. Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
3. Ozcelik, T. 2002. Uncovering the complex mysteries of mosaicism. *Nature* 417: 588.

CHROMOSOMAL LOCATION

Genetic locus: TMEM255A (human) mapping to Xq24; Tmem255a (mouse) mapping to X A3.3.

SOURCE

FAM70A (F-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 290-305 near the C-terminus of FAM70A of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM70A (F-6) is available conjugated to agarose (sc-514863 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514863 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514863 PE), fluorescein (sc-514863 FITC), Alexa Fluor[®] 488 (sc-514863 AF488), Alexa Fluor[®] 546 (sc-514863 AF546), Alexa Fluor[®] 594 (sc-514863 AF594) or Alexa Fluor[®] 647 (sc-514863 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514863 AF680) or Alexa Fluor[®] 790 (sc-514863 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514863 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

FAM70A (F-6) is recommended for detection of FAM70A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for FAM70A siRNA (h): sc-91200, FAM70A siRNA (m): sc-140459, FAM70A shRNA Plasmid (h): sc-91200-SH, FAM70A shRNA Plasmid (m): sc-140459-SH, FAM70A shRNA (h) Lentiviral Particles: sc-91200-V and FAM70A shRNA (m) Lentiviral Particles: sc-140459-V.

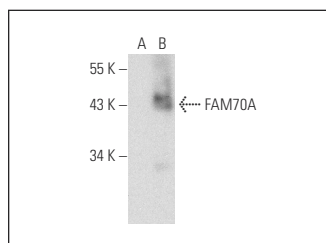
Molecular Weight of FAM70A isoform 1/2: 38/21 kDa.

Positive Controls: human FAM70A transfected HEK293T whole cell lysate.

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, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



FAM70A (F-6): sc-514863. Western blot analysis of FAM70A expression in non-transfected (A) and human FAM70A transfected (B) HEK293T whole cell lysates.

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 for detailed protocols and support products.