

CXorf21 (K-16): sc-246341

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 combinations 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 CXorf21 gene product has been provisionally designated CXorf21 pending further characterization.

REFERENCES

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2. Bernardino-Sgheri, J., Flagiello, D. and Dutrillaux, B. 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.
4. Muntoni, F., Torelli, S. and Ferlini, A. 2003. Dystrophin and mutations: one gene, several proteins, multiple phenotypes. *Lancet Neurol.* 2: 731-740.
5. 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: CXorf21 (human) mapping to Xp21.2; 5430427019Rik (mouse) mapping to X C1.

SOURCE

CXorf21 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CXorf21 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-246341 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CXorf21 (K-16) is recommended for detection of CXorf21 of human origin, 5430427019Rik of mouse origin and the corresponding rat homolog 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)], 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).

CXorf21 (K-16) is also recommended for detection of CXorf21 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CXorf21 siRNA (h): sc-91192, 5430427019Rik siRNA (m): sc-140364, CXorf21 shRNA Plasmid (h): sc-91192-SH, 5430427019Rik siRNA (m): sc-140364-SH, CXorf21 shRNA (h) Lentiviral Particles: sc-91192-V and 5430427019Rik siRNA (m): sc-140364-V.

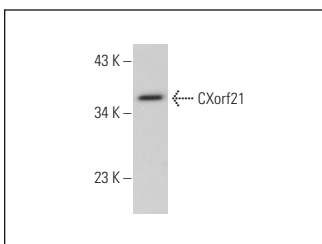
Molecular Weight of CXorf21: 34 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, U-251-MG whole cell lysate: sc-364176 or NIH/3T3 whole cell lysate: sc-2210.

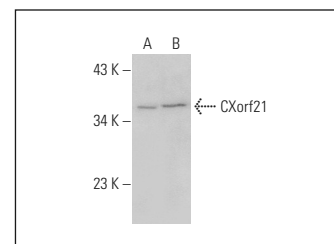
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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™ Mounting Medium: sc-24941.

DATA



CXorf21 (K-16): sc-246341. Western blot analysis of CXorf21 expression in HeLa whole cell lysate.



CXorf21 (K-16): sc-246341. Western blot analysis of CXorf21 expression in U-251-MG (A) and NIH/3T3 (B) 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.