CXorf57 (A-3): sc-514563



The Power to Question

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 unsual 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 CXorf57 gene product has been provisionally designated CXorf57 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. Ozçelik, T. 2002. Uncovering the complex mysteries of mosaicism. Nature 417: 588.
- 4. Muntoni, F., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: CXorf57 (human) mapping to Xq22.3.

SOURCE

CXorf57 (A-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-23 at the N-terminus of CXorf57 of human origin.

PRODUCT

Each vial contains 200 μ g lgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CXorf57 (A-3) is available conjugated to agarose (sc-514563 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514563 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514563 PE), fluorescein (sc-514563 FITC), Alexa Fluor® 488 (sc-514563 AF488), Alexa Fluor® 546 (sc-514563 AF546), Alexa Fluor® 594 (sc-514563 AF594) or Alexa Fluor® 647 (sc-514563 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514563 AF680) or Alexa Fluor® 790 (sc-514563 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514563 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

CXorf57 (A-3) is recommended for detection of CXorf57 of 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-

Suitable for use as control antibody for CXorf57 siRNA (h): sc-91350, CXorf57 shRNA Plasmid (h): sc-91350-SH and CXorf57 shRNA (h) Lentiviral Particles: sc-91350-V.

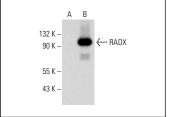
Molecular Weight of CXorf57: 98 kDa.

Positive Controls: CXorf57 (h): 293T Lysate: sc-117161 or HeLa whole cell lysate: sc-2200.

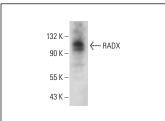
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgGκ BP-HRP: sc-516102 or m-lgGκ 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-lgGk BP-FITC: sc-516140 or m-lgGk 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







RADX (A-3): sc-514563. Western blot analysis of RADX expression in HeLa whole cell lysate.

RADX expression in non-transfected: sc-117752 (A) and human RADX transfected: sc-117161 (B) 293T whole cell lysates

SELECT PRODUCT CITATIONS

1. Balakrishnan, S., et al. 2023. Structure of RADX and mechanism for

regulation of RAD51 nucleofilaments. bioRxiv. E-published.

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.

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