SANTA CRUZ BIOTECHNOLOGY, INC.

CXorf56 (E-12): sc-241375

SANTA CRUZ BIOTECHNOLOGY

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 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 CXorf56 gene product has been provisionally designated CXorf56 pending further characterization.

REFERENCES

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3. Ozcelik, 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.
6. Bojesen, A., et al. 2006. The metabolic syndrome is frequent in Klinefelter's syndrome and is associated with abdominal obesity and hypogonadism. Diabetes Care 29: 1591-1598.
7. Hayashi, T., et al. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. Vis. Neurosci. 23: 411-417.
8. Augui, S., et al. 2007. Sensing X chromosome pairs before X inactivation via a novel X-pairing region of the Xic. Science 318: 1632-1636.

CHROMOSOMAL LOCATION

Genetic locus: CXorf56 (human) mapping to Xq24; C330007P06Rik (mouse) mapping to X A3.3.

SOURCE

CXorf56 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CXorf56 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-241375 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CXorf56 (E-12) is recommended for detection of C330007P06Rik of mouse origin, CXorf56 of human origin and RGD1564541 of rat 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)], 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 CXorf56 siRNA (h): sc-91337, C330007P06Rik siRNA (m): 141898, CXorf56 shRNA Plasmid (h): sc-91337-SH, C330007P06Rik shRNA Plasmid (m): 141898-SH, CXorf56 shRNA (h) Lentiviral Particles: sc-91337-V and C330007P06Rik shRNA (m) Lentiviral Particles: 141898.

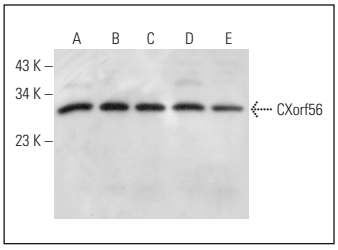
Molecular Weight of CXorf56: 26 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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



CXorf56 (E-12): sc-241375. Western blot analysis of CXorf56 expression in SK-MEL-28 (**A**), HeLa (**B**), Jurkat (**C**), K-562 (**D**) and Hep G2 (**E**) whole cell lysates.

RESEARCH USE

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