SANTA CRUZ BIOTECHNOLOGY, INC.

VCX-A (AL-78): sc-135600

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Human chromosome X contains nearly 153 million base pairs and houses over 1,000 genes, while human chromosome Y contains approximately 58 million base pairs and houses over 80 genes. The VCX and VCY (variable charge, X-linked and Y-linked, respectively) gene families are found on X and Y chromosomes and encode small, highly charged proteins that are expressed specifically on male germ cells and may be involved in spermatogenesis. There are six members of the VCX/Y family, namely VCX-A, VCX-B, VCX-B1, VCX-C, VCY and VCY1B, all of which share a high degree of homology, with the exception of an amino acid sequence that is tandemly repeated in VCX proteins, but occurs only once in VCY proteins. Mutations or deletions in the genes encoding VCX proteins are associated with X-linked mental retardation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VCX3A (human) mapping to Xp22.31.

SOURCE

VCX-A (AL-78) is a mouse monoclonal antibody raised against recombinant VCX-A protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

VCX-A (AL-78) is recommended for detection of VCX-A of human 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for VCX-A siRNA (h): sc-106688, VCX-A shRNA Plasmid (h): sc-106688-SH and VCX-A shRNA (h) Lentiviral Particles: sc-106688-V.

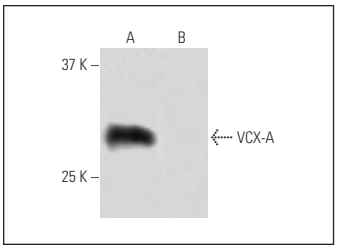
Molecular Weight of VCX-A: 20 kDa.

Positive Controls: human VCX-A transfected 293T 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).

DATA



VCX-A (AL-78): sc-135600. Western blot analysis of VCX-A expression in human VCX-A transfected (**A**) and non-transfected (**B**) 293T 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.