

CABYR (K-16): sc-84766

BACKGROUND

Spermatozoa gain fertilization capacitation and hyperactivation after residing in the uterus or oviduct. Calcium, cAMP and protein tyrosine phosphorylation are necessary for the molecular mechanisms that allow for this transformation. CABYR (Calcium-binding tyrosine phosphorylation-regulated protein), also known as Fibrousheathin-2 or cancer/testis antigen 88, is a 493 amino acid protein that is expressed in sperm flagella and exhibits increased tyrosine phosphorylation during capacitation. There are six named isoforms of CABYR that are produced as a result of alternative splicing events. Specifically, isoform 1 is expressed in the testis, while isoform 3 and isoform 5 are expressed in pancreas, brain and various brain tumors. Isoforms 1, 2 and 6 most likely bind calcium, whereas isoforms 3, 4 and 5 probably do not bind calcium.

REFERENCES

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STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: CABYR (human) mapping to 18q11.2.

SOURCE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-84766 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

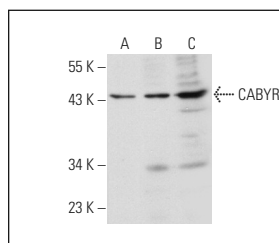
CABYR (K-16) is recommended for detection of CABYR of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CABYR siRNA (h): sc-72773, CABYR shRNA Plasmid (h): sc-72773-SH and CABYR shRNA (h) Lentiviral Particles: sc-72773-V.

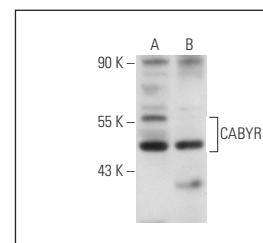
Molecular Weight of CABYR: 53 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or PC-3 cell lysate: sc-2220.

DATA



CABYR (K-16): sc-84766. Western blot analysis of CABYR expression in NTERA-2 cl.D1 (A), HeLa (B) and A549 (C) whole cell lysates.



CABYR (K-16): sc-84766. Western blot analysis of CABYR expression in ES-2 (A) and PC-3 (B) whole cell lysates.

RESEARCH USE

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