

# Speedy B (Q-20): sc-324351

## BACKGROUND

Members of the Speedy/Ringo family contain a conserved 140 amino acid domain called Speedy Box, which is essential for Cdk binding. Although they share no apparent amino acid sequence homology with cyclins, proteins in the Speedy/Ringo family can bind and activate Cdks. A common feature of all Speedy genes is their predominant expression in testis, suggesting that these genes play an important role in meiotic functions. Speedy B, also known as Speedy protein B (Spdyb), rapid inducer of G<sub>2</sub>/M progression in oocytes B, Ringo B or mSpy/Ringo B, is a 268 amino acid nuclear mouse protein that belongs to the Speedy/Ringo family. Localizing to the testis, Speedy B promotes progression through the cell cycle via binding and activation of Cdc2 p34. The gene that encodes Speedy B maps to mouse chromosome 5 G2.

## REFERENCES

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- Yamazaki, Y. and Ward, W.S. 2011. A new Speedy/RINGO protein may help regulate male meiosis. *Asian J. Androl.* 13: 363.
- Cheng, Y.M., Liu, M.L. and Jia, M.C. 2011. LM23 is a novel member of the Speedy/Ringo family at the crossroads of life and death of spermatogenic cell. *Asian J. Androl.* 13: 446-452.
- Gopinathan, L., Ratnacaram, C.K. and Kaldis, P. 2011. Established and novel Cdk/cyclin complexes regulating the cell cycle and development. *Results Probl. Cell Differ.* 53: 365-389.
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- Arumugam, K., MacNicol, M.C., Wang, Y., Cragle, C.E., Tackett, A.J., Hardy, L.L. and MacNicol, A.M. 2012. Ringo/cyclin-dependent kinase and mitogen-activated protein kinase signaling pathways regulate the activity of the cell fate determinant Musashi to promote cell cycle re-entry in *Xenopus* oocytes. *J. Biol. Chem.* 287: 10639-10649.

## CHROMOSOMAL LOCATION

Genetic locus: Spdyb (mouse) mapping to 5 G2.

## SOURCE

Speedy B (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Speedy B of mouse 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-324351 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Speedy B (Q-20) is recommended for detection of Speedy B of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with Speedy A.

Suitable for use as control antibody for Speedy B siRNA (m): sc-153739, Speedy B shRNA Plasmid (m): sc-153739-SH and Speedy B shRNA (m) Lentiviral Particles: sc-153739-V.

Molecular Weight of Speedy B: 31 kDa.

## 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.