# RNF141 (h): 293 Lysate: sc-113125



The Power to Question

# **BACKGROUND**

The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. RNF141 (ring finger protein 141), also known as ZFP26 or ZNF230, is a 230 amino acid protein that contains one RING-type zinc finger. Expressed as two isoforms (isoform 1 and isoform 2) due to alternative splicing events, RNF141 is thought to function as a transcription factor during spermatogenesis. While isoform 2 is expressed in brain, heart, pancreas, kidney and skeletal muscle, isoform 1 is expressed primarily in testis, suggesting that isoform 1 functions during spermatogenesis. In addition, RNF141 is not expressed in azoospermic (infertile) men, further implicating an important role for RNF141 in testis development and male fertility.

# **REFERENCES**

- Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. Curr. Opin. Struct. Biol. 6: 395-401.
- Lorick, K.L., Jensen, J.P., Fang, S., Ong, A.M., Hatakeyama, S. and Weissman, A.M. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. Proc. Natl. Acad. Sci. USA 96: 11364-11369.
- 3. Zhang, S., Qiu, W., Wu, H., Zhang, G., Huang, M., Xiao, C., Yang, J., Kamp, C., Huang, X., Huellen, K., Yue, Y., Pan, A., Lebo, R., Milunsky, A. and Vogt, P.H. 2001. The shorter zinc finger protein ZNF230 gene message is transcribed in fertile male testes and may be related to human spermatogenesis. Biochem. J. 359: 721-727.
- Qiu, W., Zhang, S., Xiao, C., Xu, W., Ma, Y., Liu, Y. and Wu, Q. 2003. Molecular cloning and characterization of a mouse spermatogenesis-related ring finger gene Znf230. Biochem. Biophys. Res. Commun. 306: 347-353.
- Xu, W.M., Zhang, S.Z., Qiu, W.M., He, G.P., Liu, Y.Q., Ma, Y.X. and Sun, Y. 2004. Construction of recombinant ZNF230/GFP fused plasmids and their expression and cellular localization. Yi Chuan 26: 451-454.
- Dong, J.T., Zhang, S.Z., Ma, Y.X., Yang, K.X., Huang, M.K., Sun, Y., He, G.P., Li, Y., Zhang, W. and Peng, Y. 2005. Screening for ZNF230 gene mutation and analysis of its correlation with azoospermia. Zhonghua Yi Xue Yi Chuan Xue Za Zhi 22: 258-260.
- 7. Rossi, P., Lolicato, F., Grimaldi, P., Dolci, S., Di Sauro, A., Filipponi, D. and Geremia, R. 2008. Transcriptome analysis of differentiating spermatogonia stimulated with kit ligand. Gene Expr. Patterns 8: 58-70.

# **CHROMOSOMAL LOCATION**

Genetic locus: RNF141 (human) mapping to 11p15.4.

# **PRODUCT**

RNF141 (h): 293 Lysate represents a lysate of human RNF141 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **RESEARCH USE**

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

#### **APPLICATIONS**

RNF141 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive RNF141 antibodies. Recommended use: 10-20 µl per lane.

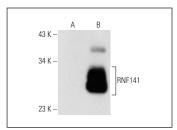
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

RNF141 (J-23): sc-101119 is recommended as a positive control antibody for Western Blot analysis of enhanced human RNF141 expression in RNF141 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# **DATA**



RNF141 (J-23): sc-101119. Western blot analysis of RNF141 expression in non-transfected: sc-110760 (A) and human RNF141 transfected: sc-113125 (B) 293 whole cell Ivsates.

# **STORAGE**

Store at -20 $^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **PROTOCOLS**

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com