ANKRD30B (S-19): sc-244927



The Power to Question

BACKGROUND

Ankyrins are membrane adaptor molecules that play important roles in coupling integral membrane proteins to the spectrin-based cytoskeleton network. Mutations of ankyrin genes lead to severe genetic diseases, such as fatal cardiac arrhythmias and hereditary spherocytosis. ANKRD30B (ankyrin repeat domain 30B), also known as serologically defined breast cancer antigen NY-BR-1.1, is a 1,477 amino acid coiled-coil protein that contains five ANK repeats and shares 54% homology with ANKRD30A. Existing as three alternatively spliced isoforms, ANKRD30B is highly expressed in testis and moderately in brain and breast tissues. Repressed in decidualizing cells after knockdown of HoxA10, which is linked to fertility, implantation and decidualization, ANKRD30B likely plays a role in cell proliferation. ANKRD30B is encoded by a gene that maps to human chromosome 18p11.21.

REFERENCES

- Jäger, D., Stockert, E., Güre, A.O., Scanlan, M.J., Karbach, J., Jäger, E., Knuth, A., Old, L.J. and Chen, Y.T. 2001. Identification of a tissue-specific putative transcription factor in breast tissue by serological screening of a breast cancer library. Cancer Res. 61: 2055-2061.
- Wang, W., Epler, J., Salazar, L.G. and Riddell, S.R. 2006. Recognition of breast cancer cells by CD8+ cytotoxic T-cell clones specific for NY-BR-1. Cancer Res. 66: 6826-6833.
- Parmigiani, R.B., Bettoni, F., Vibranovski, M.D., Lopes, M.H., Martins, W.K., Cunha, I.W., Soares, F.A., Simpson, A.J., de Souza, S.J. and Camargo, A.A. 2006. Characterization of a cancer/testis (CT) antigen gene family capable of eliciting humoral response in cancer patients. Proc. Natl. Acad. Sci. USA 103: 18066-18071.
- 4. Lu, Z., Hardt, J. and Kim, J.J. 2008. Global analysis of genes regulated by HOXA10 in decidualization reveals a role in cell proliferation. Mol. Hum. Reprod. 14: 357-366.
- Kim, J.H., Lee, M.R., Kim, J.H., Jee, M.K. and Kang, S.K. 2008. IFATS collection: Selenium induces improvement of stem cell behaviors in human adipose-tissue stromal cells via SAPK/JNK and stemness acting signals. Stem Cells 26: 2724-2734.
- 6. Beaudoin, J.D. and Perreault, J.P. 2010. 5'-UTR G-quadruplex structures acting as translational repressors. Nucleic Acids Res. 38: 7022-7036.
- SWISS-PROT/TrEMBL (Q9BXX2). World Wide Web URL: http://www.uniprot.org/uniprot/Q9BXX2

CHROMOSOMAL LOCATION

Genetic locus: ANKRD30B (human) mapping to 18p11.21.

SOURCE

ANKRD30B (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANKRD30B of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244927 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANKRD30B (S-19) is recommended for detection of ANKRD30B of human 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 ANKRD30A.

Molecular Weight of ANKRD30B: 168 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat lgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat lgG-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 lgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat lgG-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.

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**