ANKRD30A (C-18): sc-163686



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. ANKRD30A (ankyrin repeat domain 30A), also known as serologically defined breast cancer antigen NY-BR-1, is a 1,397 amino acid coiled-coil protein. Containing 6 ANK repeats and 37 exons, ANKRD30A is a distant homolog of the POTE family. Initiated by either Dnmt1 or Met-57, ANKRD30A is highly expressed in breast and testis, and faintly in placenta. Present in 80% of breast cancers, but not in other types of tumors, ANKRD30A is a differentiation antigen and a potential target for antibody based therapies in breast cancers.

REFERENCES

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- Jäger, D., et al. 2005. Humoral and cellular immune responses against the breast cancer antigen NY-BR-1: definition of two HLA-A2 restricted peptide epitopes. Cancer Immun. 5: 11.
- 3. Lacroix, M. 2006. Significance, detection and markers of disseminated breast cancer cells. Endocr. Relat. Cancer 13: 1033-1067.
- Hahn, Y., et al. 2006. Duplication and extensive remodeling shaped POTE family genes encoding proteins containing ankyrin repeat and coiled coil domains. Gene 366: 238-245.
- 5. Rossi, M.R., et al. 2006. Array CGH analysis of pediatric medulloblastomas. Genes Chromosomes Cancer 45: 290-303.
- Shen, L., et al. 2007. Genome-wide profiling of DNA methylation reveals a class of normally methylated CpG island promoters. PLoS Genet. 3: 2023-2036.
- 7. Belousov, P.V., et al. 2008. Cancer-associated antigens and antigen arrays in serological diagnostics of malignant tumors. Biochemistry 73: 562-572.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD30A (human) mapping to 10p11.21.

SOURCE

ANKRD30A (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ANKRD30A of human origin.

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-163686 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANKRD30A (C-18) is recommended for detection of ANKRD30A 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); non cross-reactive with other ANKRD family members.

Suitable for use as control antibody for ANKRD30A siRNA (h): sc-90829, ANKRD30A shRNA Plasmid (h): sc-90829-SH and ANKRD30A shRNA (h) Lentiviral Particles: sc-90829-V.

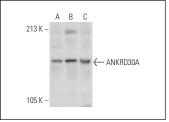
Molecular Weight of ANKRD30A: 159 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, MDA-MB-231 cell lysate: sc-2232 or MCF7 whole cell lysate: sc-2206.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ANKRD30A (C-18): sc-163686. Western blot analysis of ANKRD30A expression in MCF7 (A), MDA-MB-231 (B) and NTERA-2 cl.D1 (C) 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 or our catalog for detailed protocols and support products.

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