

TBCA (I-12): sc-107100

BACKGROUND

TBCA (Tubulin-specific chaperone A), also known as Tubulin-folding cofactor A, is a 108 amino acid cytoplasmic protein that belongs to the TBCA family. As a tubulin-folding protein, TBCA is involved in the early step of the tubulin folding pathway. The tubulin-folding supercomplex is made up of cofactors A to E. Cofactors A and D function by capturing and stabilizing tubulin in a quasi-native conformation, which is then followed by cofactor E binding to the cofactor D-tubulin complex. Interaction with cofactor C then causes the release of tubulin polypeptides that are committed to the native state. The gene that encodes TBCA consists of nearly 178,000 bases and maps to human chromosome 5q14.1. With 181 million base pairs encoding around 1,000 genes, chromosome 5 makes up about 6% of human genomic DNA. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome and deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TBCA (human) mapping to 5q14.1; Tbca (mouse) mapping to 13 D1.

SOURCE

TBCA (I-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TBCA 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-107100 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TBCA (I-12) is recommended for detection of TBCA of mouse, rat and 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).

Suitable for use as control antibody for TBCA siRNA (h): sc-91635, TBCA siRNA (m): sc-154113, TBCA shRNA Plasmid (h): sc-91635-SH, TBCA shRNA Plasmid (m): sc-154113-SH, TBCA shRNA (h) Lentiviral Particles: sc-91635-V and TBCA shRNA (m) Lentiviral Particles: sc-154113-V.

Molecular Weight of TBCA: 13 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 or our catalog for detailed protocols and support products.