Monoclonal anti-human TBCA antibody (clone AT1A5)

Cat. No. ATGA0155

**Immunogen:** Recombinant TBCA (1-108aa) purified from *E. coli*

**NCBI Accession No.:** NP_004598

**Isotype:** Mouse IgG₂b, κ

**Clone:** Anti-human TBCA mAb, clone AT1A5, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human TBCA protein.

**Description:** Tubulin folding cofactor A, also known as TBCA, is one of four proteins (cofactors A, D, E, and C) involved in the pathway leading to correctly folded beta-tubulin from folding intermediates. Cofactors A and D are believed to play a role in capturing and stabilizing beta-tubulin in a quasi-native confirmation. This protein is essential for cell viability and its knockdown produces a decrease in the amount of soluble tubulin, modifications in microtubules and G1 cell cycle arrest.

**Concentration:** 1mg/ml

**Form:** Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol.

**Storage:** Can be stored at +4°C. For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.

**Usage:** The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

**Application:** ELISA, WB, Flow cytometry, ICC/IF
Western blot analysis
The LNCap cell lysates (20μg) were resolved by SDS-PAGE, transferred to NC membrane and probed with anti-human TBCA antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HeLa cell lysate
Lane 2.: K562 cell lysate

Western blot analysis
The Cell lysates (40μg) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human TBCA antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Flow cytometry
Flow cytometry analysis of TBCA in HeLa cell line, staining at 2-5μg for 1x10⁶ cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate.
**ICC/IF analysis**

ICC/IF analysis of TBCA in A549 cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human TBCA antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

**ICC/IF analysis**

ICC/IF analysis of TBCA in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human TBCA antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).
