**Monoclonal anti-human Casein Kinase 1 alpha antibody (clone AT2E2)**

**Cat. No. ATGA0149**

**Immunogen:** Recombinant human Casein Kinase 1 alpha (1-337aa) purified from *E. coli*

**NCBI Accession No.:** NP_001883

**Isotype:** Mouse IgG2b, κ

**Clone:** Anti-human Casein Kinase 1 alpha mAb, clone AT2E2, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human Casein Kinase 1 alpha protein.

**Description:** Caseine Kinase 1 alpha belongs to the protein kinase superfamily, CK1 Ser/Thr protein kinase family, Casein kinase I subfamily. CK1 isoforms (alpha, beta, gamma, delta, epsilon) and their splice variants are involved in diverse cellular processes including membrane trafficking, circadian rhythm, cell cycle progression, chromosome segregation, apoptosis and cellular differentiation. Perhaps it can phosphorylate a large number of proteins and is involved in Wnt signaling where it phosphorylates CTNNB1 on Ser45. Caseine kinase 1 alpha also interacts with the Axin complex.

**Concentration:** 1 mg/ml

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

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

**Usage:** The antibody has been tested by ELISA and Western blot analysis 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, ICC/IF
Western blot analysis
Cell lysates of HeLa and MCF7 (40ug) were resolved by SDS-PAGE, transferred to NC membrane and probed with anti-human Casein Kinase 1 alpha (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

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

Lane 1.: Jurkat cell lysate
ICC/IF analysis

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