

**Anti-Rat CSNK2A1 Polyclonal Antibody****Polyclonal Antibody****Cat.NO.: PA01996**

3th Edition

**Description:** Catalytic subunit of a constitutively active serine/threonine-protein kinase complex that phosphorylates a large number of substrates containing acidic residues C-terminal to the phosphorylated serine or threonine. Regulates numerous cellular processes, such as cell cycle progression, apoptosis and transcription, as well as viral infection. May act as a regulatory node which integrates and coordinates numerous signals leading to an appropriate cellular response. During mitosis, functions as a component of the p53/TP53-dependent spindle assembly checkpoint (SAC) that maintains cyclin-B-CDK1 activity and G2 arrest in response to spindle damage. Also required for p53/TP53-mediated apoptosis, phosphorylating 'Ser-392' of p53/TP53 following UV irradiation. Can also negatively regulate apoptosis. Phosphorylates the caspases CASP9 and CASP2 and the apoptotic regulator NOL3. Phosphorylation protects CASP9 from cleavage and activation by CASP8, and inhibits the dimerization of CASP2 and activation of CASP8. Regulates transcription by direct phosphorylation of RNA polymerases I, II, III and IV. Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, SRF, MAX, JUN, FOS, MYC and MYB. Phosphorylates Hsp90 and its co-chaperones FKBP4 and CDC37, which is essential for chaperone function. Regulates Wnt signaling by phosphorylating CTNNB1 and the transcription factor LEF1.

**Antigen:** Recombinant human Casein kinase II subunit alpha protein

**Form:**

**How to use:** 1.0 ml distilled water will be added to the product

**Stability:** Lyophilized product, 5 years at 2 – 8°C; Solution, 2 years at –20°C

**Dilution:** PBS (pH7.4) containing 1% BSA

**Application:** This antibody can be used for western blotting in concentration of 1?5?g/ml.

**Specificity:** Expressed in gastric carcinoma tissue and the expression gradually increases with the progression of the carcinoma (at protein level).