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|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | Casein Kinase I $\alpha$ (phospho Tyr294) Rabbit Polyclonal Antibody                                                                             |
| <b>Cat number:</b>       | ABN04363                                                                                                                                         |
| <b>Conjugate:</b>        | Unconjugated                                                                                                                                     |
| <b>Size:</b>             | 100 $\mu$ L                                                                                                                                      |
| <b>Clone:</b>            | Polyclonal                                                                                                                                       |
| <b>Concentration:</b>    | 1mg/ml                                                                                                                                           |
| <b>Host:</b>             | Rabbit                                                                                                                                           |
| <b>Isotype:</b>          | IgG                                                                                                                                              |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from human CK-1 alpha around the phosphorylation site of Tyr294. AA range:260-309 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                                                  |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000                                                                           |
| <b>Molecular Weight:</b> | 37kDa                                                                                                                                            |
| <b>Purification:</b>     | Affinity purification                                                                                                                            |
| <b>Form:</b>             | Liquid                                                                                                                                           |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                                                               |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.                                                     |

**Background:**

CSNK1A1 (Casein Kinase 1 Alpha 1) is a Protein Coding gene. Among its related pathways are Signaling by GPCR and Infectious disease. GO annotations related to this gene include transferase activity, transferring phosphorus-containing groups and protein tyrosine kinase activity. An important paralog of this gene is CSNK1G2. Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Phosphorylates CTNNB1 at Ser-45. May phosphorylate PER1 and PER2. May play a role in segregating chromosomes during mitosis (PubMed: 11955436, PubMed: 1409656, PubMed: 18305108). May play a role in keratin cytoskeleton disassembly and thereby, it may regulate epithelial cell migration (PubMed: 23902688). Casein kinase I (CK1) is a monomeric serine-threonine protein kinase with 7 isoforms: alpha, beta, gamma1, gamma2, gamma3, delta and epsilon. CK1 is involved in many cellular processes including DNA repair, cell division, nuclear localization and membrane transport. Isoforms are also integral to development. catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Phosphorylates CTNNB1 on 'Ser-45'. ,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Monomer. Interacts with the Axin complex.,