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|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | ARK-1 (phospho Thr288) Rabbit Polyclonal Antibody                                                                                                   |
| <b>Cat number:</b>       | ABN04258                                                                                                                                            |
| <b>Conjugate:</b>        | Unconjugated                                                                                                                                        |
| <b>Size:</b>             | 100µL                                                                                                                                               |
| <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 Aurora Kinase around the phosphorylation site of Thr288. AA range:256-305 |
| <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 1:5000-1:10000                                                                              |
| <b>Molecular Weight:</b> | 45kDa                                                                                                                                               |
| <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:**

The protein encoded by this gene is a cell cycle-regulated kinase that appears to be involved in microtubule formation and/or stabilization at the spindle pole during chromosome segregation. The encoded protein is found at the centrosome in interphase cells and at the spindle poles in mitosis. This gene may play a role in tumor development and progression. A processed pseudogene of this gene has been found on chromosome 1, and an unprocessed pseudogene has been found on chromosome 10. Multiple transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008], catalytic activity: ATP + a protein = ADP + a phosphoprotein., caution: Although authors have considered STK6 and STK15 as two different proteins, it is clear that they are the same protein., disease: Defects in AURKA are responsible for numerical centrosome aberrations including aneuploidy., function: May play a role in cell cycle regulation during anaphase and/or telophase, in relation to the function of the centrosome/spindle pole region during chromosome segregation. May be involved in microtubule formation and/or stabilization. Phosphorylates ARHGEF2 and BORA., PTM: Phosphorylated upon DNA damage, probably by ATM or ATR., similarity: Belongs to the protein kinase superfamily., similarity: Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Aurora subfamily., similarity: Contains 1 protein kinase domain., subcellular location: Localizes on centrosomes in interphase cells and at each spindle pole in mitosis., subunit: Interacts with TACC1 and CPEB1. Interacts with its substrates BORA and ARHGEF2., tissue specificity: Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly expressed in colon, ovarian, prostate, neuroblastoma, breast and cervical cancer cell lines. Expression is cell-cycle regulated, low in G1/S, accumulates during G2/M, and decreases rapidly after.,