Mouse Serine/threonine-protein kinase PLK1 (PLK1) ELISA Kit

Catalog No: #EK8434

Package Size: #EK8434-1 48T #EK8434-2 96T

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Mouse Serine/threonine-protein kinase PLK1 (PLK1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	PLK; STPK13; cell cycle regulated protein kinase|polo (Drosophia)-like kinase|polo like kinase|polo-like kinase 1
Accession No.	Q07832
Uniprot	Q07832
GeneID	18817;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:39-2500 pg/mL

Sensitivity:9.77 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PLK1 in samples. An antibody specific for PLK1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPLK1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PLK1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PLK1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Plk1 consists of 603 amino acids and is 66kDa. In addition to the N-terminus kinase domain, there are two conserved polo-box regions of 30 amino acids at the C-terminus.

Plk1 is an early trigger for G2/M transition. Plk1 supports the functional maturation of the centrosome in late G2/early prophase and establishment of the bipolar spindle. Plk1 phosphorylates and activates cdc25C, a phosphatase that dephosphorylates and activates the cyclinB/cdc2 complex. Plk phosphorylates and activates components of the APC. The APC, which is activated by Fizzy-Cdc20 family proteins, is a cell cycle ubiquitin-protein ligase (E3) that degrades mitotic cyclins, chromosomal proteins that maintain cohesion of sister chromatids, and anaphase inhibitors.

Note: This product is for in vitro research use only