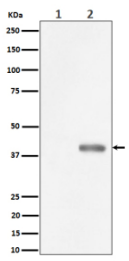
Phospho-PBK (pThr9) Antibody / PDZ binding kinase [clone 30P33] (FY12793)

Catalog No.	Formulation	Size
FY12793	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30P33
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q96KB5
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200
Limitations	This Phospho-PBK (pThr9) Antibody is available for research use only.



Western blot analysis of Phospho-PBK/TOPK (pThr9) expression in (1) HeLa cell lysate; (2) HeLa cell treated with Nocodazole lysate using Phospho-PBK (pThr9) Antibody. Predicted molecular weight of the PBK protein is ~36 kDa

Description

Phospho-PBK (pThr9) antibody detects PDZ binding kinase, also known as lymphokine activated killer T cell origin

protein kinase (TOPK), when phosphorylated at threonine 9. PBK is encoded by the PBK gene and belongs to the MAP kinase kinase family. It is highly expressed in proliferating cells, especially in testis, placenta, and activated lymphocytes. Phosphorylation at Thr9 regulates PBK kinase activity, influencing cell cycle progression and mitotic events. This makes Phospho-PBK (pThr9) antibody a key tool for studying proliferative signaling and tumor biology.

Phospho-PBK (Thr9) antibody is widely applied in oncology, immunology, and cell cycle research. PBK activation supports G2/M transition by phosphorylating downstream substrates involved in spindle formation and chromosome segregation. It also participates in immune signaling pathways in T cells and NK cells. By detecting phosphorylation at Thr9, researchers can monitor PBK activation and its role in proliferation and immunity.

Applications for Phospho-PBK (Thr9) antibody include western blotting, immunohistochemistry, and immunofluorescence. Western blot assays detect phosphorylated PBK isoforms, immunohistochemistry maps expression in tumors, and immunofluorescence reveals subcellular localization at centrosomes during mitosis. These complementary approaches provide detailed evaluation of PBK biology.

Dysregulated PBK activity is implicated in multiple cancers, including lung, breast, and hematologic malignancies. Elevated Thr9 phosphorylation correlates with tumor grade and poor prognosis, reflecting hyperactive proliferation. In immune biology, PBK phosphorylation regulates lymphocyte activation, linking cell cycle control to host defense. By applying Phospho-PBK (pThr9) antibody, scientists can study these dual roles in cancer and immunity.

Therapeutic research has targeted PBK as a potential kinase for inhibition. Small molecule inhibitors reduce proliferation and sensitize tumor cells to chemotherapy. Monitoring Thr9 phosphorylation provides a pharmacodynamic readout of drug activity. Phospho-PBK (pThr9) antibody from NSJ Bioreagents offers strong specificity for this site specific modification, supporting mechanistic and translational research into kinase biology.

Application Notes

Optimal dilution of the Phospho-PBK (pThr9) Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Phospho-PBK/TOPK (pThr9) was used as the immunogen for the Phospho-PBK (pThr9) Antibody.

Storage

Store the Phospho-PBK (pThr9) Antibody at -20oC.

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