

# Human PBK/TOPK Protein

Cat. No. PBK-HB101

## Description

<b>Source</b>	Recombinant Human PBK/TOPK Protein is expressed from Baculovirus-Insect Cells with His tag at the C-terminus. It contains Met1-Val322.
<b>Accession</b>	Q96KB5-1
<b>Molecular Weight</b>	The protein has a predicted MW of 37.61 kDa. Due to glycosylation, the protein migrates to 38-45 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

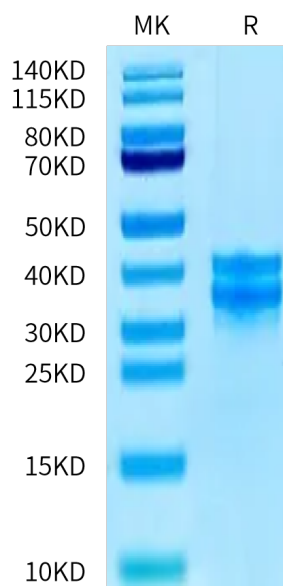
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

T-lymphokine-activated killer cell-originated protein kinase (TOPK, also known as PDZ-binding kinase or PBK) plays a crucial role in cell cycle regulation and mitotic progression. Abnormal overexpression or activation of TOPK has been observed in many cancers, including colorectal cancer, triple-negative breast cancer, and melanoma, and it is associated with increased development, dissemination, and poor clinical outcomes and prognosis in cancer. Moreover, TOPK phosphorylates p38, JNK, ERK, and AKT, which are involved in many cellular functions, and participates in the activation of multiple signaling pathways related to MAPK, PI3K/PTEN/AKT, and NOTCH1.

## Assay Data

### Bis-Tris PAGE



Human PBK on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.