

32-3070: PBK Recombinant Protein

Alternative Name : Lymphokine-activated killer T-cell-originated protein kinase, Cancer/testis antigen 84, CT84, MAPKK-like protein kinase, Nori-3, PDZ-binding kinase, Spermatogenesis-related protein kinase, SPK, T-LAK cell-originated protein kinase, PBK, TOPK.

Description

Source : Escherichia Coli. PBK Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 346 amino acids (1-322 a.a) and having a molecular mass of 38.6kDa (Molecular weight on SDS-PAGE will appear higher). PBK is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Lymphokine-activated killer T-cell-originated protein kinase (PBK) is a serine/threonine kinase related to the dual specific mitogen-activated protein kinase (MAPKK) family. PBK is abundant in placenta (is also found in the testis' outer cell layer of seminiferous tubules) and absent from adult brain tissue. PBK is involved in the activation of lymphoid cells and supports testicular functions, with a possible role in the process of spermatogenesis. Mitotic phosphorylation is required for PBK's catalytic activity. Once phosphorylated, PBK forms a complex with TP53, leading to TP53 destabilization and weakening of G2/M checkpoint during doxorubicin-induced DNA damage. PBK is active only during mitosis. In addition, a PDZ domain in the tumor suppressor protein Dlg can coordinate with the T/SXV motif of PBK. PBK also phosphorylates MAP kinase p38, and may have a role in the activation of lymphoid cells.

Product Info

Amount : 20 µg
Purification : Greater than 95.0% as determined by SDS-PAGE.
Content : PBK protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 1mM DTT, 10% glycerol and 0.1M NaCl.
Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid : MGSSHHHHHH SGLVPRGSH MGSHMEGISH FKTPSKLSEK KKSVCSTPT INIPASPFMQ
KLGFGTGVNV YLMKRSPRGL SHSPWAVKKI NPICNDHYRS VYQKRLMDEA KILKSLHHPN
IVGYRAFTEA NDGSLCLAME YGGEKSLNDL IEERYKASQD PFPAAILKV ALNMARGLKY
LHQEKLLHG DIKSSNVVVK GDFETIKICD VGVSLPLDEN MTVTDPEACY IGTEPWKPK
AVEENGVITD KADIFAFGLT LWEMMTLSIP HINLSNDDDD EDKTFDESDF DDEAYYAALG
TRPPINMEEL DESYQKVIEL FSVCTNEDPK DRPSAAHIVE ALETDV.

