

Catalog No.: RP03414LQ **Recombinant**

Species	Gene ID	Swiss Prot
Human	10188	O07912

Tags
N-GST

TNK2; ACK1; ACK-1; ACK; p21cdc42Hs;
 Activated CDC42 kinase 1; Tyrosine
 kinase non-receptor protein 2

Source	Purification
Baculovirus-Insect Cells	≥ 85% as determined by SDS-PAGE; ≥ 85% as determined by HPLC.

Calculated MW	Observed MW
68.4 kDa	60-70 kDa

< 1 EU/μg of the protein by LAL method.

Supplied as a 0.22 μm filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 20% glycerol, 5 mM DTT, 0.1 M Trehalose. (pH 7.5). Contact us for customized product form or formulation.

Please use running water to thaw it quickly.

 | 400-999-6126

 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

Activated CDC42 kinase 1, also known as ACK1, is an enzyme that in humans is encoded by the *TNK2* gene. ACK1 binds to multiple receptor tyrosine kinases e.g. EGFR, MERTK, AXL, HER2 and insulin receptor (IR). ACK1 also interacts with Cdc42Hs in its GTP-bound form and inhibits both the intrinsic and GTPase-activating protein (GAP)-stimulated GTPase activity of Cdc42Hs. This binding is mediated by a unique sequence of 47 amino acids C-terminal to an SH3 domain. The protein may be involved in a regulatory mechanism that sustains the GTP-bound active form of Cdc42Hs and which is directly linked to a tyrosine phosphorylation signal transduction pathway. ACK1 is a survival kinase and shown to be associated with tumor cell survival, proliferation, hormone-resistance and radiation resistance. The activation of ACK1 has been observed in prostate, breast, pancreatic, lung and ovarian cancer cells.

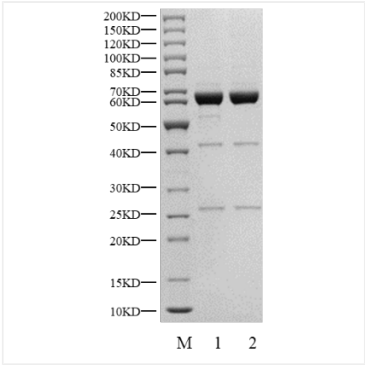
Recombinant Human ACK1/TNK2 Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Gly110-Trp476) of Human TNK2 (Accession #O07912) fused with a N-GST tag.

The activity of ACK is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

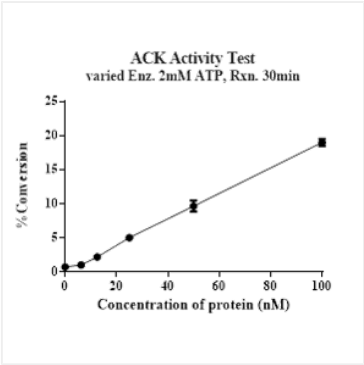
Store at -70°C. This product is stable at $\leq -70^{\circ}\text{C}$ for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

Validation Data



Recombinant Human ACK1/TNK2 Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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