

RP03414LQ

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Recombinant Human ACK1/TNK2 Kinase

Catalog No.: RP03414LQ **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Baculovirus- Insect Cells	10188	Q07912

Tags

N-GST

Synonyms

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

Product Information

Source

Purification

≥ 85% as
determined by
SDS-PAGE; ≥ 85%
as determined by
HPLC.

Endotoxin

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

Formulation

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.

Reconstitution

Please use running water to thaw it
quickly.

Contact



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Background

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.

Basic Information

Description

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 #Q07912) fused with a N-GST tag.

Bio-Activity

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.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

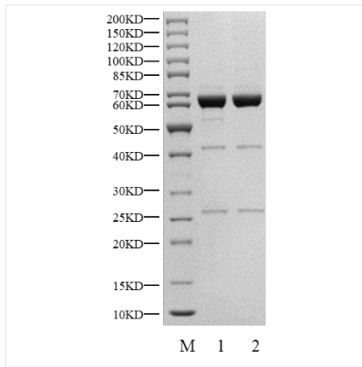
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

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

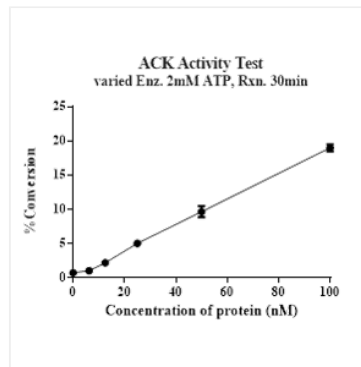
Avoid repeated freeze/thaw cycles.

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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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