Recombinant Human TLK2/PKU-ALPHA Protein

Catalog Number: PKSH030362

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	Baculovirus-Insect Cells-derived Human TLK2/PKU-ALPHA protein Leu 397-Asn 772
Calculated MW	43.6 kDa
Observed MW	44 kDa
Accession	Q86UE8-1
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel
	packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, 3mM DTT, 10% glycerol, pH
	8.0
Data	
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18.4	
14.4	

> 95 % as determined by reducing SDS-PAGE.

Background

Serine / threonine-protein kinase tousled-like 2; also known as PKU-alpha; Tousled-like kinase 2 and TLK2; is a nucleus protein which belongs to theprotein kinase superfamily and Ser/Thr protein kinase family. The tousled-like kinases are an evolutionarily conserved family of proteins implicated in DNA repair; DNA replication and mitosis in metazoans and plants. Their absence from the yeasts and other eukaryotic 'microbes' suggests a specific role for them in the development of multicellular organisms. Tousled-like kinase 2 / TLK2 is widely expressed. It is present in fetal placenta; liver; kidney; pancreas; heart and skeletal muscle. It is also found in adult cell lines. Tousled-like kinase 2 / TLK2 contains oneprotein kinase domain. Tousled-like kinase 2 / TLK2 is rapidly and transiently inhibited by phosphorylation following the generation of DNA double-stranded breaks during S-phase. This is cell cycle checkpoint and ATM-pathway dependent and appears to regulate processes involved in chromatin assembly.

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