



Recombinant Protein Technical Manual

Recombinant Human TLK2/PKU-ALPHA Protein

RPES1232

Product Data:

Product SKU: RPES1232

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q86UE8

Protein Information:

Molecular Mass: 43.6 kDa

AP Molecular Mass: 44 kDa

Tag:

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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°C.

Formulation: Supplied as sterile 20mM Tris, 500mM NaCl, 3mM DTT, 10% glycerol, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: HsHPK;PKU-ALPHA

Immunogen Information:

Sequence: Leu 397-Asn772

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 the protein 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 one protein 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.