

Recombinant Human Thymidine kinase/TK1 protein

Catalog No.: RP03232LQ **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	7093	P04183

Tags

C-His

Synonyms

Thymidine kinase; cytosolic; TK1

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Calculated MW	Observed MW
26.5 KDa	28 KDa

Endotoxin

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

Formulation

Supplied as a 0.22 μm filtered solution in 20mM Tris-HCl, 150mM NaCl, 1mM DTT, 2mM EDTA, 10% Glycerol, pH 7.5.

Contact us for customized product form or formulation.

Reconstitution

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Background

Thymidine kinase 1(TK1) belongs to the thymidine kinase family. It is located in the cytoplasm, and phosphorylated on Ser-13 in mitosis during post-translational modification. Two forms of this protein have been identified in animal cells, one in cytosol TK1 and one in mitochondria TK2. Thymidine kinases have a key function in the synthesis of DNA and thereby in cell division, as they are part of the unique reaction chain to introduce deoxythymidine into the DNA. Activity of the cytosolic enzyme is high in proliferating cells and peaks during the S-phase of the cell cycle, while it is very low in resting cells. TK1 acts as a homotetramer, and can transform thymidine to thymidine 5'-phosphate with the help of ATP.

Basic Information

Description

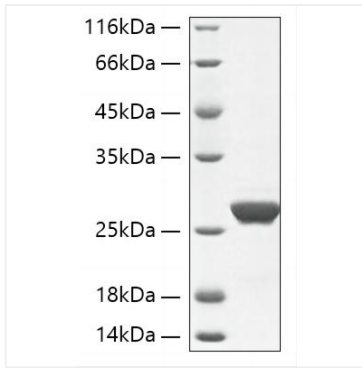
Recombinant Human Thymidine kinase/TK1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Asn234) of Human Thymidine kinase/TK1 (Accession #NP_003249.3) fused with a 6×His tag at the C-terminus.

Bio-Activity

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. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human Thymidine kinase/TK1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 28kDa.