

## Recombinant Human Thymidylate Kinase/DTYMK Protein (His Tag)

Catalog No. PKSH033115

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

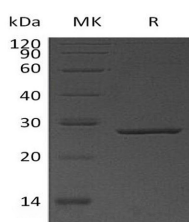
### Description

<b>Synonyms</b>	Thymidylate kinase;dTMP kinase;DTYMK;CDC8;TMPK;TYMK
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Lys212
<b>Accession</b>	P23919
<b>Calculated Molecular Weight</b>	24.9 kDa
<b>Observed molecular weight</b>	25-31 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 10% Sucrose, 0.05% Tween 80, 20% Glycerol, 1mM EDTA, pH8.0.
<b>Reconstitution</b>	Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Thymidylate kinase (DTYMK) is a ubiquitous enzyme of about 25 kD which belongs to thymidylate kinase family. DTYMK is important in the dTTP synthesis pathway for DNA synthesis. It participated in the pyrimidine metabolism pathway and dTTP biosynthesis pathway. DTYMK catalyzes the conversion of dTMP to dTDP and catalyzes the phosphorylation of thymidine 5'-monophosphate (dTMP) to form thymidine 5'-diphosphate (dTDP) in the presence of ATP and magnesium. Structural and functional analyses suggest that the cDNA codes for authentic human dTMP kinase.

### For Research Use Only

The mRNA levels and enzyme activities corresponded to cell cycle progression and cell growth stages.