

Recombinant Human Thymidylate Kinase/DTYMK Protein (His Tag)

Catalog Number: PKSH033115

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

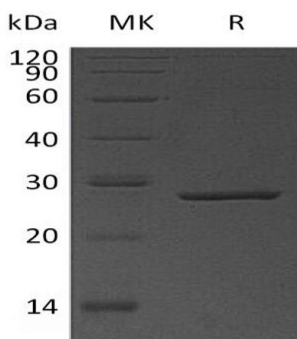
Description

Species	Human
Source	HEK293 Cells-derived Human Thymidylate Kinase;DTYMK protein Met 1-Lys212, with an C-terminal His
Calculated MW	24.9 kDa
Observed MW	25-31 kDa
Accession	P23919
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°C.
Formulation	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.

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