

32-3126: TK2 Recombinant Protein

Alternative Name : Thymidine kinase 2 mitochondrial,Mt-TK,TK2,MTTK,MTDPS2.

Description

Source : E.coli. TK2 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 257 amino acids (34-265 a.a) and having a molecular mass of 30.2kDa.TK2 is fused to a 25 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Thymidine kinase 2 mitochondrial (TK2) is a member of the DCK/DGK family. TK2 is an enzyme, a phosphotransferase (a kinase): 2'-deoxythymidine kinase, ATP-thymidine 5'-phosphotransferase. Thymidine kinase is found in most living cells. Thymidine kinase is present in 2 forms in mammalian cells, TK1 and TK2. Thymidine kinases have a central function in the synthesis of DNA and thus in cell division, since they are part of the exceptional reaction chain to introduce deoxythymidine into the DNA. TK2 is a deoxyribonucleoside kinase which specifically phosphorylates thymidine, deoxycytidine, and deoxyuridine. TK2 localizes to the mitochondria and is essential for mitochondrial DNA synthesis. TK2 gene defects are a cause of mitochondrial DNA depletion syndrome type 2 (MTDPS2).

Product Info

Amount :	10 µg
Purification :	Greater than 85% as determined by SDS-PAGE.
Content :	TK2 protein solution (0.5mg/ml) containing 20mM Tris-HCl buffer, pH8.0, 30% glycerol, 2mM DTT and 200mM NaCl.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.
Amino Acid :	MGSSHHHHHH SSGLVPRGSH MGSVMVQRRR WPPDKEQEKE KKSVCICVEGN IASGKTTCLE FFSNATDVEV LTEPVSKWRN VRGHNPLGLM YHDASRWGLT LQTYVQLTML DRHTRPQVSS VRLMERSIHS ARYIFVENLY RSGKMPEVDY VVLSEWFDWI LRNMDVSVDL IVYLRNTPET CYQLKKRCR EEEKVIPLEY LEAIHHLHEE WLIKGS LFPM AAPVLVIEAD HHMERMLELF EQNRDRILTP ENRKHCP.