

Product datasheet for **TP727184**

Thymidine Kinase 1 (TK1) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Human Thymidine Kinase, Cytosolic/TK1 (C-6His)
Species:	Human
Expression cDNA Clone or AA Sequence:	Met1-Asn234
Tag:	C-His
Buffer:	Supplied as a 0.2 um filtered solution of 20mM Tris-HCl, 150mM NaCl, 1mM DTT, 2mM EDTA, 10% Glycerol, pH 7.5.
Note:	Recombinant Human Thymidine kinase, Cytosolic is produced by our Mammalian expression system and the target gene encoding Met1-Asn234 is expressed with a 6His tag at the C-terminus.
Storage:	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Stability:	12 months from date of despatch
Locus ID:	7083
UniProt ID:	P04183
Summary:	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 thymidime to thymidine 5'-phosphate with the help of ATP



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