for research use only Datasheet

Product Name	Recombinant Human herpesvirus 1 Thymidine kinase(TK)				
Catalog Number	AAA18691				
Expression host	E.coli				
Product Info	N-terminal 6xHis-tagged				
Storage Buffer	0.2 μm sterile filtered 20 mM Tris-HCl, 0.5 M NaCl, pH 8.0, 50% glycerol				
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.				
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.				
Relevance	Catalyzes the transfer of the gamma-phospho group of ATP to thymidine to generate dTMP in the salvage pathway of pyrimidine synthesis. The dTMP serves as a substrate for DNA polymerase during viral DNA replication. Allows the virus to be reactivated and to grow in non-proliferative cells lacking a high concentration of phosphorylated nucleic acid precursors.				
AA sequence	MASYPCHQHASAFDQAARSRGHNNRRTALRPRRQQEATEVRPEQKMPTLLR VYIDGPHGMGKTTTTQLLVALGSRDDIVYVPEPMTYWRVLGASETIANIYTT QHRLDQGEISAGDAAVVMTSAQITMGMPYAVTDAVLAPHIGGEAGSSHAPPP ALTLIFDRHPIAALLCYPAARYLMGSMTPQAVLAFVALIPPTLPGTNIVLGALP EDRHIDRLAKRQRPGERLDLAMLAAIRRVYGLLANTVRYLQCGGSWREDWG QLSGTAVPPQGAEPQSNAGPRPHIGDTLFTLFRAPELLAPNGDLYNVFAWALD VLAKRLRSMHVFILDYDQSPAGCRDALLQLTSGMVQTHVTTPGSIPTICDLAR TFAREMGEAN				
References	"Biochemical and structural characterization of (South)-methanocarbathymidine that specifically inhibits growth of herpes simplex virus type 1 thymidine kinase-transduced osteosarcoma cells." Schelling P., Claus M.T., Johner R., Marquez V.E., Schulz G.E., Scapozza L. J. Biol. Chem. 279:32832-32838(2004)				

for research use only Certificate of Analysis

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Batch Number	YC04546a7g5				
Nature	Human herpesvirus 1 TK-(AA 1-376)- P0DTH5 -Full Length				
Purification	Affinity purified using IMAC				
Recommended Storage	Short term	2 to 8 °C, one week from the date of receipt			
	Long term	-20 to -80 °C, six months from the date of receipt			
Form	Liquid				
Date of detection	2022.02.24				
Test Items	Specifications			Results	
Appearance	Clear Solution			pass	
Concentration	0.1-5 mg/ml, by the Bradford Method.		0.2 mg/ml		
Purity	≥90%, by SDS-PAGE quantitative densitom Coomassie Blue Stair	etry by	kDa M 116.0 == 66.2 45.0 == 35.0	90%	
Molecular Weight	Predicted band size: 4	15.0 kDa	25.0 18.4 14.4	Observed band size: 45 kDa	

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Electrophoretic parameters	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
Aseptic Processing	0.2 μm sterile filtered
Endotoxin Level	Untreated
Activity	Not tested
Conclusion	pass