Active Recombinant Human CDK14/CyclinY, GST-tagged

Cat. No. CDK14-116H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human full-length PFTK1 (CDK14) and Cyclin Y (2-end) were co-expressed by baculovirus in Sf9 insect cells using N-terminal GST tags.
Species	Human
Source	Sf9 Cells
Description	PFTK1 is a member of the CDC2 - related protein kinase family which is expressed primarily in the postnatal and adult nervous system. PFTK1 is expressed at high levels in brain, pancreas, kidney, heart, testis, and ovary. PFTK1 amino acid residue ser119 is required for its interaction with all four 14-3-3 isoforms, while ser120 may contribute slightly to PFTK1 binding. PFTK1 acts as a cyclin-dependent kinase that regulates cell cycle progression and cell proliferation. Overexpression of PFTK1 predicts resistance to chemotherapy in patients with oesophageal squamous cell carcinoma.
Form	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Bio-activity	The specific activity of PFTK1 (CDK14)/CyclinY was determined to be 2.5 nmol /min/mg
Molecular Mass	PFTK1 (CDK14) ~72 kDa and Cyclin Y ~64 kDa
Purity	>90% by densitometry

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Applications	Kinase Assay, Western Blot
Storage	Store product at –70 centigrade. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	0.1 μg/μl

GENE INFORMATION

Gene Name	CDK14 cyclin-dependent kinase 14 [Homo sapiens]
Official Symbol	CDK14
Synonyms	CDK14; cyclin-dependent kinase 14; PFTAIRE protein kinase 1 , PFTK1; PFTAIRE1; hPFTAIRE1; PFTAIRE protein kinase 1; cell division protein kinase 14; serine/threonine-protein kinase PFTAIRE-1; PFTK1; KIAA0834;
Gene ID	5218
mRNA Refseq	NM_012395
Protein Refseq	NP_036527
MIM	610679
UniProt ID	O94921
Chromosome Location	7q21-q22

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Pathway	Transcriptional misregulation in cancer, organism-specific biosystem; Transcriptional misregulation in cancer, conserved biosystem;
Function	ATP binding; cyclin binding; cyclin-dependent protein kinase activity; nucleotide binding; protein binding;

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