Recombinant Human CDK14, GST-tagged

Cat. No. CDK14-180H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human PFTK1 (CDK14) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
Description	PFTK1, also known as PFTAIRE protein kinase 1, is a member of the CDC2 -related protein kinase family which is expressed primarily in the postnatal and adult nervous system. PFTK1 is highly expressed in brain, pancreas, kidney, heart, testis, and ovary. PFTK1 interacts with 14-3-3-beta, 14-3-3-epsilon, 14-3-3-eta and 14-3-3-tau. Using PFTK1 mutant constructs and in vitro and in vivo binding studies, it was shown that PFTK1 amino acid residue ser119 is required for its interaction with all four 14-3-3 isoforms. Significant upregulation of PFTK1 expression is observed in oesophageal squamous cell carcinoma (ESCC). PFTK1 is not only useful as a prognostic marker in ESCC, but also as a predictor of the response to chemotherapy.
Form	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 50mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Molecular Mass	~72 kDa
Purity	>95% by densitometry
Applications	Kinase Assay, Western Blot

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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
Pathway	Transcriptional misregulation in cancer, organism-specific biosystem; Transcriptional misregulation in cancer, conserved biosystem;

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Function	ATP binding; cyclin binding; cyclin-dependent protein kinase activity; nucleotide binding; protein binding;

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