



Human PCK1 peptide (DAG-P1860)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene is a main control point for the regulation of gluconeogenesis. The cytosolic enzyme encoded by this gene, along with GTP, catalyzes the formation of phosphoenolpyruvate from oxaloacetate, with the release of carbon dioxide and GDP. The expression of this gene can be regulated by insulin, glucocorticoids, glucagon, cAMP, and diet. Defects in this gene are a cause of cytosolic phosphoenolpyruvate carboxykinase deficiency. A mitochondrial isozyme of the encoded protein also has been characterized. [provided by RefSeq, Jul 2008]
Specificity	Major sites of expression are liver, kidney and adipocytes.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the phosphoenolpyruvate carboxykinase [GTP] family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	PCK1 phosphoenolpyruvate carboxykinase 1 (soluble) [Homo sapiens (human)]
Official Symbol	PCK1
Synonyms	PCK1; phosphoenolpyruvate carboxykinase 1 (soluble); PEPCK1; PEPCKC; PEPCK-C; phosphoenolpyruvate carboxykinase, cytosolic [GTP]; PEP carboxykinase; phosphopyruvate carboxylase; phosphoenolpyruvate carboxylase; phosphoenolpyruvate carboxykinase,

cytosolic;

Entrez Gene ID	5105
mRNA Refseq	NM_002591.3
Protein Refseq	NP_002582.3
UniProt ID	P35558
Chromosome Location	20q13.31
Pathway	Abacavir metabolism, organism-specific biosystem; Abacavir transport and metabolism, organism-specific biosystem; Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Adipogenesis, organism-specific biosystem; Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Developmental Biology, organism-specific biosystem; FOXA2 and FOXA3 transcription factor networks, organism-specific biosys
Function	GDP binding; GTP binding; carboxylic acid binding; magnesium ion binding; manganese ion binding; phosphoenolpyruvate carboxykinase (GTP) activity;