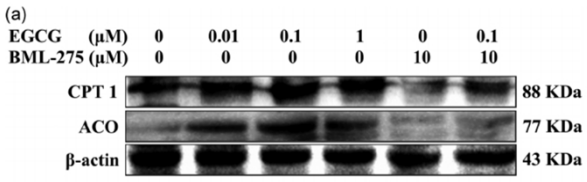
CPT1A rabbit pAb

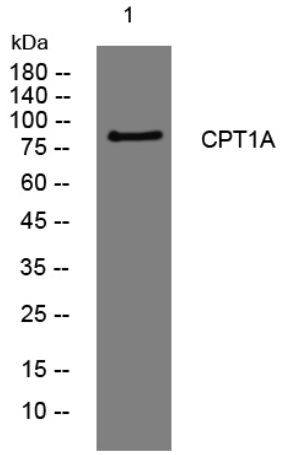
Catalog No	YP-Ab-08231
Isotype	IgG
Reactivity	Human; Mouse;Rat;Canine
Applications	WB
Gene Name	CPT1A CPT1
Protein Name	CPT1A
Immunogen	Synthesized peptide derived from human CPT1A. AA range 40-80
Specificity	This antibody detects endogenous levels of CPT1A at Human/Mouse/Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.346% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Carnitine O-palmitoyltransferase 1, liver isoform (CPT1-L) (EC 2.3.1.21) (Carnitine O-palmitoyltransferase I, liver isoform) (CPT I) (CPTI-L) (Carnitine palmitoyltransferase 1A)
Observed Band	85kD
Cell Pathway	Mitochondrion outer membrane ; Multi-pass membrane protein .
Tissue Specificity	Strong expression in kidney and heart, and lower in liver and skeletal muscle.
Function	catalytic activity:Palmitoyl-CoA + L-carnitine = CoA + L-palmitoylcarnitine.,disease:Defects in CPT1A are the cause of carnitine palmitoyltransferase I deficiency (CPT-I deficiency) [MIM:255120]; also known as CPT1A deficiency. CPT I deficiency is a rare autosomal recessive metabolic disorder of long-chain fatty acid oxidation characterized by severe episodes of hypoketotic hypoglycemia usually occurring after fasting or illness. Onset is in infancy or early childhood.,enzyme regulation:Inhibitors such as malonyl-CoA interact with its catalytic domain and not with an associated regulatory component.,pathway:Lipid metabolism; fatty acid beta-oxidation.,similarity:Belongs to the carnitine/choline acetyltransferase family.,tissue specificity:Strong expression in kidney and heart, and lower in liver and skeletal muscle.,

Background	The mitochondrial oxidation of long-chain fatty acids is initiated by the sequential action of carnitine palmitoyltransferase I (which is located in the outer membrane and is detergent-labile) and carnitine palmitoyltransferase II (which is located in the inner membrane and is detergent-stable), together with a carnitine-acylcarnitine translocase. CPT I is the key enzyme in the carnitine-dependent transport across the mitochondrial inner membrane and its deficiency results in a decreased rate of fatty acid beta-oxidation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

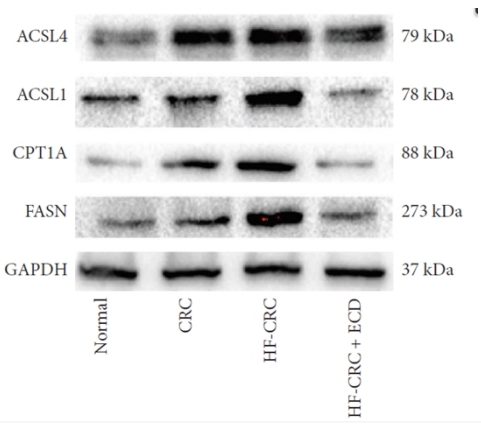
Products Images



Ding, Hongyan, et al. "Epigallocatechin-3-gallate activates the AMP-activated protein kinase signaling pathway to reduce lipid accumulation in canine hepatocytes." Journal of Cellular Physiology 236.1 (2021): 405-416.



Western blot analysis of lysates from 293T cells, primary antibody was diluted at 1:1000, 4°over night



Regulation of Fatty Acid Metabolism and Inhibition of Colorectal Cancer Progression by Erchen Decoction Evidence-based Complementary and Alternative Medicine Linghong Liao, Fei Zhang, Zewei Zhuo, Chengbao Huang, Xiaofang Zhang, Ruifang Liu, Bizhen Gao, Shanshan Ding WB Mouse colorectal tissue