Active Recombinant Full Length Human PPARA, GST-tagged

Cat. No. PPARA-1084H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	
Species	Human
Source	E.coli
ProteinLength	1-468 a.a.
Description	There is evidence that a group of closely related nuclear receptors, called Peroxisome Proliferator-activated Receptors (PPARs), may be involved in chronic diseases such as diabetes, obesity, atherosclerosis and cancer. The PPARs were first cloned as the nuclear receptors that mediate the effects of synthetic compounds called peroxisome proliferators on gene transcription. It soon became clear that eicosanoids and fatty acids can also regulate gene transcription through PPARs. They bind a specific element in the promoter region of target genes only as a heterodimer with the receptor for 9-cis retinoic acid, RXR (retinoid X receptor). Binding of the ligand of either receptor can activate the complex, but binding of both ligands simultaneously is more potent. Three PPAR isotypes have been identified: α,β (also called NUC1) and γ. PPARα is expressed most in brown adipose tissue and liver, then kidney, heart and skeletal muscle. PPARγ is mainly expressed in adipose tissue, and to a lesser extent in colon, the immune system and the retina. PPARβ is found in many tissues but the highest expression is in the gut, kidney and heart. The target genes of PPARα are a relatively homogenous group of genes that participate in aspects of lipid catabolism such as fatty acid uptake through membranes, fatty acid binding in cells, fatty acid oxidation (in microsomes, peroxisomes and mitochondria)

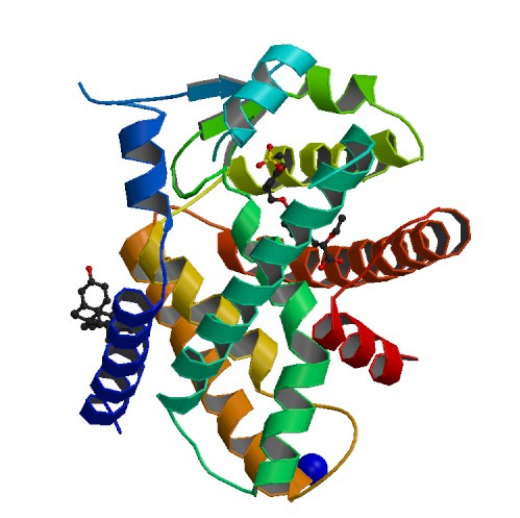
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	and lipoprotein assembly and transport. Recombinant GST-PPARα is isolated from an E. coli strain that carries the coding sequence of the human PPARα under the control of a T7 promoter.
Form	Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 Mm KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.
Purity	> 95% by SDS-PAGE.
Application	PPARα has been applied in DNA and protein-protein interaction assays.
Activity	20 ng are sufficient for a gel-mobility shift assay and 100 ng are sufficient for a protein-protein interaction assay.
Usage	For in vitro use only.
Storage	Quality guaranteed for 12 months store at -80°C. Avoid freeze / thaw cycles.

GENE INFORMATION

Gene Name	PPARA peroxisome proliferator-activated receptor alpha [Homo sapiens]
Synonyms	PPARA; peroxisome proliferator-activated receptor alpha; PPAR; NR1C1; hPPAR; MGC2237; MGC2452; PPARalpha; peroxisome proliferative activated receptor, alpha; OTTHUMP00000197740; OTTHUMP00000197741; PPAR-alpha; Nuclear receptor subfamily 1 group C member 1
Gene ID	5465
mRNA Refseq	NM_001001928

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Protein Refseq	NP_001001928
MIM	170998
UniProt ID	Q07869
Chromosome Location	22q12-q13.1
Pathway	Adipocytokine signaling pathway; PAR signaling pathway; Metabolism of lipids and lipoproteins
Function	drug binding; ligand-regulated transcription factor activity; lipid binding; metal ion binding; protein domain specific binding; sequence-specific DNA binding; steroid hormone receptor activity; transcription activator activity; transcription factor activity; zinc ion binding
PDB rendering based on 1i7g.	

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