PPAR gamma Protein, Human (P.pastoris, His)

Cat. No.:	HY-P702572
Synonyms:	CIMT1, GLM1, NR1C31, PPARG2, PPARG5, PPARgamma, PPARG
Species:	Human
Source:	P. pastoris
Accession:	P37231-2 (M1-Y477)
Gene ID:	5468
Molecular Weight:	56-60 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	PPAR gamma Protein, a nuclear receptor, binds to peroxisome proliferators such as hypolipidemic drugs and fatty acids. Upon ligand activation, the nuclear receptor interacts with specific PPAR response elements (PPRE) on DNA, modulating the transcription of target genes like acyl-CoA oxidase and thereby controlling the peroxisomal beta-oxidation pathway of fatty acids. It plays a pivotal role as a key regulator in adipocyte differentiation and glucose homeostasis. Additionally, PPAR gamma acts as a critical regulator of gut homeostasis by suppressing NF-kappa-B-mediated pro-inflammatory responses. In the context of cardiovascular circadian rhythms, it regulates the transcription of BMAL1 in blood vessels. Furthermore, in response to microbial infection, particularly treatment with M.tuberculosis or its lipoprotein LpqH, PPAR gamma modulates phosphorylation of MAPK p38 and IL-6 production, suggesting its involvement in immune responses during microbial challenges.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA