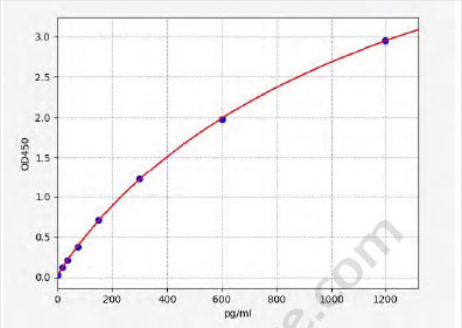
DGAT1 (Diacylglycerol O-Acyltransferase 1) (DGAT1) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	DGAT1 (Diacylglycerol O-acyltransferase 1), ELISA Kit
Full Product Name	Human DGAT1 (Diacylglycerol O-acyltransferase 1)
Product Gene Name	DGAT1 elisa kit
Product Synonym Names	hCG_24006/ARGP1/DGAT/ACAT related gene product 1/ acyl coenzyme A:cholesterol acyltransferase related gene 1/diacylglycerol O-acyltransferase 1/diglyceride acyltransferase/diacylglycerol O-acyltransferase homolog 1
Species Reactivity	Human
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	18.75-1200pg/ml
Sensitivity	11.2pg/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of DGAT1. No significant cross-reactivity or interference between DGAT1 and analogues was observed.
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Inter-assay Precision	CV<10%
Intra-assay Precision	CV<8%
Molecular Weight	55,278 Da
OMIM	604900
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for DGAT1 elisa kit	Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Capture antibody was pre-coated onto 96-well plates. And the biotin conjugated antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and washed with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the target amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of target can be calculated.
Other Notes	Small volumes of DGAT1 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for DGAT1 purchase	MBS766095 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the DGAT1 (Diacylglycerol O-acyltransferase 1) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing DGAT1. The ELISA analytical biochemical technique of the MBS766095 kit is based on DGAT1 antibody-DGAT1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect DGAT1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, DGAT1. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of DGAT1 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DGAT1. It may not necessarily be applicable to this product.

NCBI GI #	145864459
NCBI GeneID	8694
NCBI Accession #	NP_036211.2
UniProt Secondary Accession #	Q96BB8; B2RWQ2; D3DWL6
UniProt Related Accession #	O75907
GenBank Nucleotide #	NM_012079.5
NCBI Official Full Name	diacylglycerol O-acyltransferase 1
NCBI Official Synonym Full Names	diacylglycerol O-acyltransferase 1
NCBI Official Symbol	DGAT1
NCBI Official Synonym Symbols	ARAT; DGAT; ARGP1; DIAR7
UniProt Protein Name	Diacylglycerol O-acyltransferase 1
UniProt Synonym Protein Names	ACAT-related gene product 1; Acyl-CoA retinol O-fatty-acyltransferase (EC:2.3.1.76
Protein Family	Diacylglycerol O-acyltransferase
UniProt Gene Name	DGAT1
UniProt Synonym Gene Names	AGRP1; DGAT; ARAT; Retinol O-fatty-acyltransferase
UniProt Entry Name	DGAT1_HUMAN
NCBI Protein Information	diacylglycerol O-acyltransferase 1
NCBI Summary for DGAT1	This gene encodes an multipass transmembrane protein that functions as a key metabolic enzyme. The encoded protein catalyzes the conversion of diacylglycerol and fatty acyl CoA to triacylglycerol. This enzyme can also transfer acyl CoA to retinol. Activity of this protein may be associated with obesity and other metabolic diseases. [provided by RefSeq, Jul 2013]

UniProt Comments for DGAT1	DGAT1: Catalyzes the terminal and only committed step in triacylglycerol synthesis by using diacylglycerol and fatty acyl CoA as substrates. In contrast to DGAT2 it is not essential for survival. May be involved in VLDL (very low density lipoprotein) assembly. In liver, plays a role in esterifying exogenous fatty acids to glycerol. Functions as the major acyl-CoA retinol acyltransferase (ARAT) in the skin, where it acts to maintain retinoid homeostasis and prevent retinoid toxicity leading to skin and hair disorders. Belongs to the membrane-bound acyltransferase family. Sterol o-acyltransferase subfamily. Protein type: EC 2.3.1.76; Lipid Metabolism - glycerolipid; Cofactor and Vitamin Metabolism - retinol; Membrane protein, integral; Transferase; EC 2.3.1.20; Membrane protein, multi-pass Chromosomal Location of Human Ortholog: 8q24.3 Cellular Component: endoplasmic reticulum membrane; integral to membrane Molecular Function: 2-acylglycerol O-acyltransferase activity; diacylglycerol O-acyltransferase activity; protein binding; retinol O-fatty-acyltransferase activity; transferase activity, transferring acyl groups Biological Process: diacylglycerol metabolic process; fatty acid homeostasis; retinol metabolic process; sequestering of lipid; triacylglycerol biosynthetic process; triacylglycerol metabolic process Disease: Diarrhea 7
Research Articles on DGAT1	**1.** Data indicate no clinically relevant pharmacokinetic interaction between DGAT-1 inhibitor pradigastat and rosuvastatin.
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