

Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 ELISA Kit

SKU: MOFI01208

Datasheet:

Key features and Sample Types

Aliases:

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

Uniprot:

Q9Z2A7

Detection method:

Sandwich

Sample Type:

Serum, Plasma and other biological fluids

Range:

18.75-1200pg/ml

Sensitivity:

11.2 pg/ml

Storage & Expiry

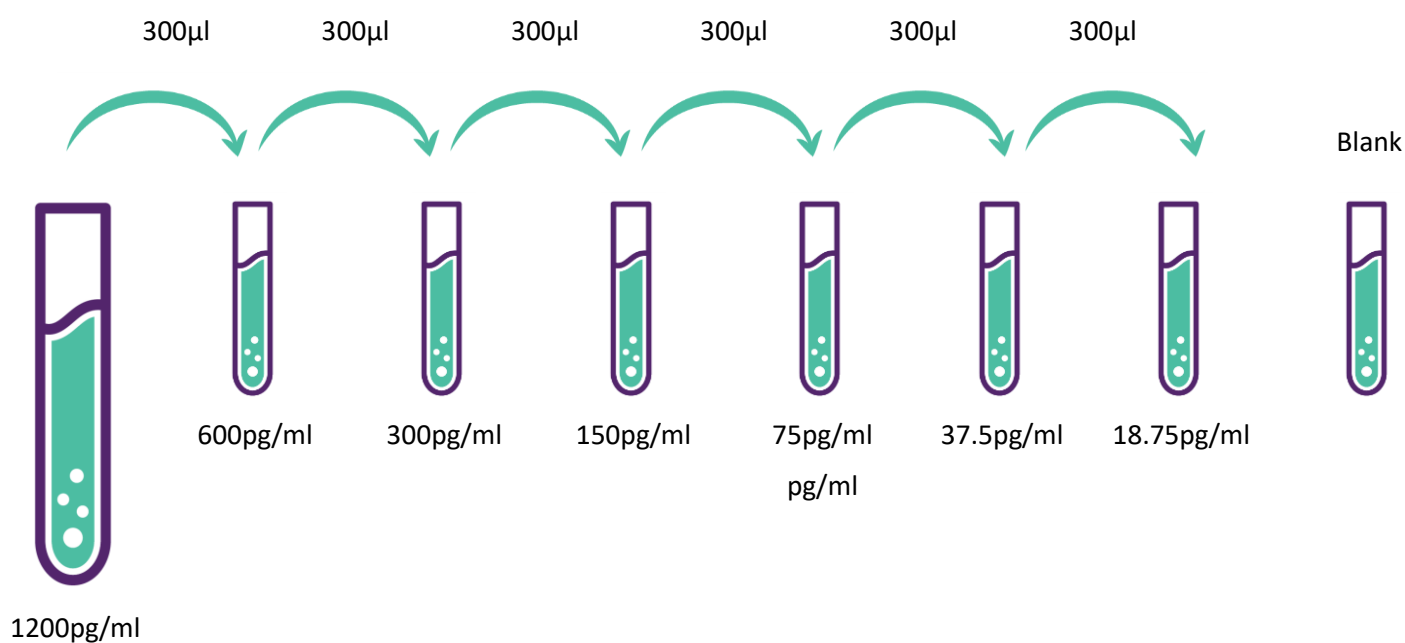
ELISA Genie ELISA Kits are shipped on ice packs. Please store this ELISA Kit at 4°C. Date of expiration will be on the ELISA Box label.

Standard dilution

1). 1200pg/ml of standard solution: Add 1 ml of Sample / Standard dilution buffer into one Standard tube, keep the tube at room temperature for 10 min and mix thoroughly.

2). 1200pg/ml --> 18.75pg/ml of standard solutions: Label 6 Eppendorf tubes with 600pg/ml, 300pg/ml, 150pg/ml, 75pg/ml, 37.5pg/ml, 18.75pg/ml, respectively. Aliquot 300µl of the Sample / Standard dilution buffer into each tube. Add 300µl of the above 1200pg/ml standard solution into 1st tube and mix thoroughly. Transfer 300µl from 1st tube to 2nd tube and mix thoroughly. Transfer 300µl from 2nd tube to 3rd tube and mix thoroughly, and so on.

DILUTION SERIES



Note: The standard solutions are best used within 2 hours. The standard solution series should be kept at 4°C for up to 12 hours. Or store at -20 °C for up to 48 hours. Avoid repeated freeze-thaw cycles.

Typical Data & Standard Curve

Results of a typical standard run of Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment.

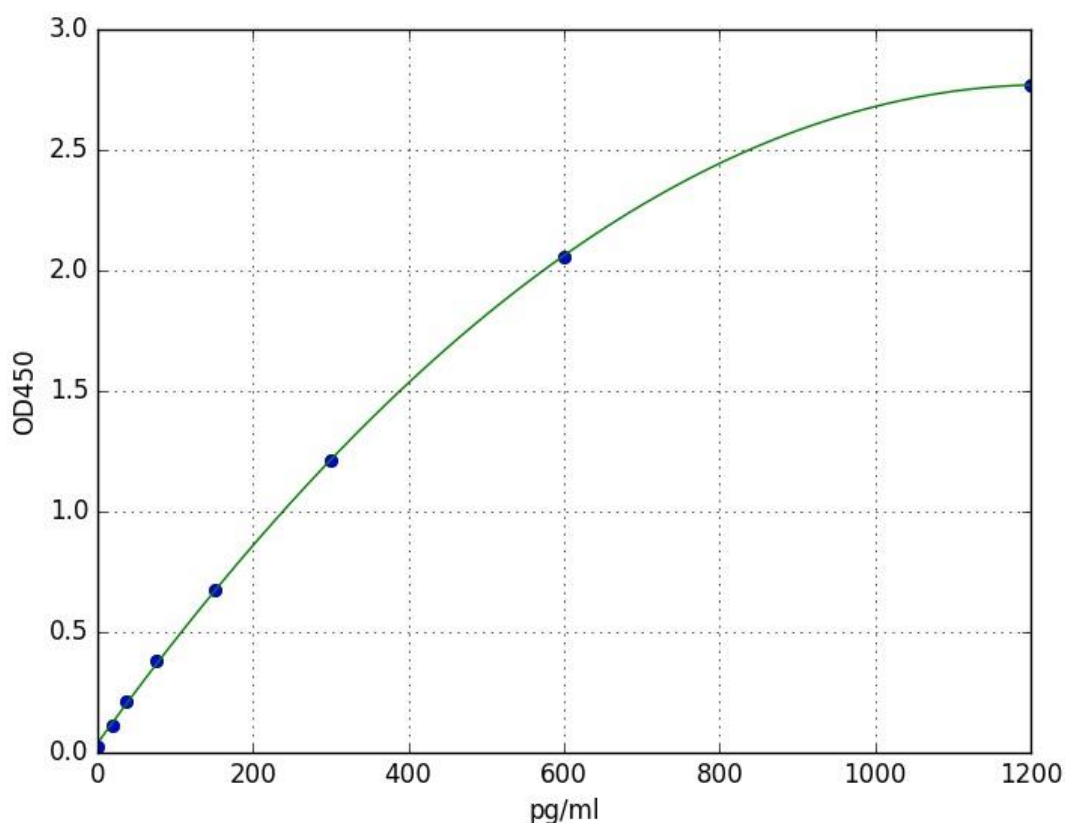
Specificity

This assay has high sensitivity and excellent specificity for detection of Mouse DGAT1 / Diacylglycerol O-acyltransferase 1. No significant cross-reactivity or interference between Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 and analogues was observed.

Recovery

Matrices listed below were spiked with Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 and the recovery rates were calculated by comparing the measured value to the expected amount of Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 in samples.

| Matrix | Recovery range (%) | Average (%) |
|--------------------------|---------------------------|--------------------|
| Serum (n=5) | 88-105 | 93 |
| EDTA plasma (n=5) | 86-104 | 95 |
| UFH plasma (n=5) | 87-93 | 91 |



Linearity

The linearity of the kit was assayed by testing samples spiked with appropriate concentration of Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 and their serial dilutions.

| Sample | 1:2 | 1:4 | 1:8 | 1:16 |
|-------------------|---------|---------|---------|---------|
| Serum (n=5) | 88-100% | 89-105% | 93-105% | 93-101% |
| EDTA plasma (n=5) | 85-99% | 82-100% | 87-98% | 82-101% |
| UFH plasma (n=5) | 81-100% | 80-93% | 84-100% | 83-95% |

Precision

- **Intra-assay Precision (Precision within an assay):** 3 samples with low, middle and high level Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 were tested 20 times on one plate, respectively.
- **Inter-assay Precision (Precision between assays):** 3 samples with low, middle and high level Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 were tested on 3 different plates, 8 replicates in each plate.
- **CV (%):** $SD/mean \times 100$
- **Intra-Assay:** CV<8%
- **Inter-Assay:** CV<10%

Stability

The stability of the Mouse DGAT1 / Diacylglycerol O-acyltransferase 1 ELISA Kit is determined by the loss rate of activity. The loss rate of this kit is less than 10% within the expiration date under appropriate storage conditions.

| Standard (n=5) | 37°C for 1 month | 4°C for 6 months |
|----------------|------------------|------------------|
| Average (%) | 80 | 95-100 |

To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

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