

# Goat anti-Adipogenin (mouse) Antibody

Peptide-affinity purified goat antibody

Catalog # AF4400a

## Product Information

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|-------------------|-----------------------------|
| Application       | Pep-ELISA                   |
| Primary Accession | <a href="#">Q8R400</a>      |
| Other Accession   | <a href="#">NP_663610.1</a> |
| Reactivity        | Mouse                       |
| Host              | Goat                        |
| Clonality         | Polyclonal                  |
| Clone Names       | Adig                        |
| Calculated MW     | 9362                        |

## Additional Information

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|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID     | 246747                                                                                                                                                     |
| Other Names | Adig; adipogenin; SMAF-1; Smaf1; small adipocyte factor 1                                                                                                  |
| Dilution    | Pep-ELISA~~N/A                                                                                                                                             |
| Format      | Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing. |
| Storage     | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.                   |
| Precautions | Goat anti-Adipogenin (mouse) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.                                    |

## Protein Information

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| Name     | Adig {ECO:0000303   PubMed:41196993, ECO:0000312   MGI:MGI:2675492}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Function | Key regulator of lipid storage that promotes the expansion of lipid droplets during the formation of mature adipocytes (PubMed: <a href="#">16132694</a> , PubMed: <a href="#">33691105</a> , PubMed: <a href="#">41196993</a> ). Acts by forming a dodecameric complex with seipin (BSCL2) when adipocytes have differentiated and are undergoing maturation (PubMed: <a href="#">41196993</a> ). In the dodecameric complex, ADIG antagonizes the activity of BSCL2 by reducing BSCL2-mediated triacylglycerol nucleation and relieving BSCL2's inhibition of GPAT3 and GPAT4 (PubMed: <a href="#">41196993</a> ). GPAT3 and GPAT4 then translocate to lipid droplets, promoting the synthesis of triacylglycerols and the expansion of lipid droplets (PubMed: <a href="#">41196993</a> ). |

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| <b>Cellular Location</b> | Endoplasmic reticulum membrane; Single-pass membrane protein. Nucleus                                                                                                                                                                                                                                                                                                                                                   |
| <b>Tissue Location</b>   | Selectively expressed in adipose tissue where it is particularly enriched in brown adipose tissue (PubMed:15567149, PubMed:16132694). In adipose tissue, expressed exclusively in adipocytes and not in the stromal-vascular cell population (PubMed:15567149, PubMed:16132694). Expressed at much lower levels in heart, stomach and muscle and barely detected in kidney and lung (PubMed:15567149, PubMed:16132694). |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.