

Goat anti-Adipogenin (mouse, aa41-52) Antibody

Peptide-affinity purified goat antibody

Catalog # AF4401a

Product Information

Application	IHC, Pep-ELISA
Primary Accession	Q8R400
Other Accession	NP_663610.1
Reactivity	Mouse
Host	Goat
Clonality	Polyclonal
Clone Names	Adig
Calculated MW	9362

Additional Information

Gene ID	246747
Other Names	Adig; adipogenin; SMAF-1; Smaf1; small adipocyte factor 1
Dilution	IHC~~1:100~500 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, aa41-52) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

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: 16132694 , PubMed: 33691105 , PubMed: 41196993). Acts by forming a dodecameric complex with seipin (BSCL2) when adipocytes have differentiated and are undergoing maturation (PubMed: 41196993). 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: 41196993). GPAT3 and GPAT4 then translocate to lipid droplets, promoting the synthesis of triacylglycerols and the expansion of lipid droplets (PubMed: 41196993).

Cellular Location	Endoplasmic reticulum membrane; Single-pass membrane protein. Nucleus
Tissue Location	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'.