

**Goat Anti-Lipin 3 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1627a

**Specification**

---

**Goat Anti-Lipin 3 Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">O9BOK8</a>
Other Accession	<a href="#">NP_075047</a> , <a href="#">64900</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	93614

**Goat Anti-Lipin 3 Antibody - Additional Information**

**Gene ID** 64900

**Other Names**

Phosphatidate phosphatase LPIN3, 3.1.3.4, Lipin-3, Lipin-3-like, LPIN3, LIPN3L

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**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-Lipin 3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Lipin 3 Antibody - Protein Information**

**Name** LPIN3 ([HGNC:14451](#))

**Synonyms** LIPN3L

**Function**

Magnesium-dependent phosphatidate phosphatase enzyme which catalyzes the conversion of phosphatidic acid to diacylglycerol during triglyceride, phosphatidylcholine and phosphatidylethanolamine biosynthesis therefore regulates fatty acid metabolism.

**Cellular Location**

Nucleus.

#### **Tissue Location**

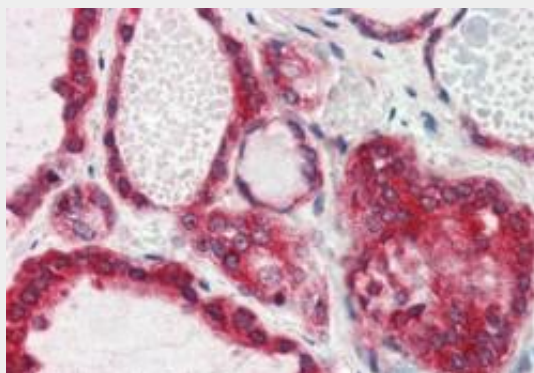
Significant expression in intestine and other regions of the gastrointestinal tract.

#### **Goat Anti-Lipin 3 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Goat Anti-Lipin 3 Antibody - Images**



AF1627a (2.5 µg/ml) staining of paraffin embedded Human Thyroid Gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

#### **Goat Anti-Lipin 3 Antibody - Background**

Human lipodystrophy is characterized by loss of body fat, fatty liver, hypertriglyceridemia, and insulin resistance. Mice carrying mutations in the fatty liver dystrophy (fld) gene have similar phenotypes. Through positional cloning, the mouse gene responsible for fatty liver dystrophy was isolated and designated Lpin1. The nuclear protein encoded by Lpin1 was named lipin. Lpin1 mRNA was expressed at high levels in adipose tissue and was induced during differentiation of preadipocytes. These results indicated that lipin is required for normal adipose tissue development and provided a candidate gene for human lipodystrophy. Through database searches, mouse and human EST and genomic sequences with similarities to Lpin1 were identified. These included two related mouse genes (Lpin2 and Lpin3) and three human homologs (LPIN1, LPIN2, and LPIN3). Human LPIN1 gene has been mapped to 2p25.; linkages of fat mass and serum leptin levels to this same region have been noted. Human LPIN2 and LPIN3 mapped to chromosomes 18p11 and 20q11-q12, respectively. The mouse genes encoding Lpin1, Lpin2, and Lpin3 mapped to chromosome 12, 17, and 2, respectively.

#### **Goat Anti-Lipin 3 Antibody - References**

Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.

Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.

The DNA sequence and comparative analysis of human chromosome 20. Deloukas P, et al. Nature, 2001 Dec 20-27. PMID 11780052.

Lipodystrophy in the fld mouse results from mutation of a new gene encoding a nuclear protein, lipin. Pfister M, et al. Nat Genet, 2001 Jan. PMID 11138012.

Adipose tissue deficiency, glucose intolerance, and increased atherosclerosis result from mutation in the mouse fatty liver dystrophy (fld) gene. Reue K, et al. J Lipid Res, 2000 Jul. PMID 10884287.