

**LPIN1 / Lipin 1 Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16028****Specification**

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**LPIN1 / Lipin 1 Antibody (C-Terminus) - Product Information**

Application	WB, IF, IHC
Primary Accession	<a href="#">Q14693</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	99kDa KDa

**LPIN1 / Lipin 1 Antibody (C-Terminus) - Additional Information****Gene ID** 23175**Other Names**

Phosphatidate phosphatase LPIN1, 3.1.3.4, Lipin-1, LPIN1, KIAA0188

**Target/Specificity**

LPIN1 antibody is human and mouse reactive. At least four isoforms of LPIN1 are known to exist.

**Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

**Precautions**

LPIN1 / Lipin 1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**LPIN1 / Lipin 1 Antibody (C-Terminus) - Protein Information****Name** LPIN1 ([HGNC:13345](#))**Synonyms** KIAA0188**Function**

Acts as a magnesium-dependent phosphatidate phosphatase enzyme which catalyzes the conversion of phosphatidic acid to diacylglycerol during triglyceride, phosphatidylcholine and phosphatidylethanolamine biosynthesis and therefore controls the metabolism of fatty acids at different levels (PubMed: <http://www.uniprot.org/citations/20231281> target="\_blank">20231281</a>, PubMed: <http://www.uniprot.org/citations/29765047> target="\_blank">29765047</a>). Is involved in adipocyte differentiation (By similarity). Acts also as nuclear transcriptional coactivator for PPARGC1A/PPARA regulatory pathway to modulate lipid metabolism gene expression (By similarity). Recruited at the mitochondrion outer membrane and is involved in mitochondrial fission by converting phosphatidic acid to diacylglycerol (By similarity).

**Cellular Location**

Cytoplasm, cytosol. Endoplasmic reticulum membrane. Nucleus membrane {ECO:0000250|UniProtKB:Q91ZP3}. Note=Translocates from the cytosol to the endoplasmic reticulum following acetylation by KAT5

#### Tissue Location

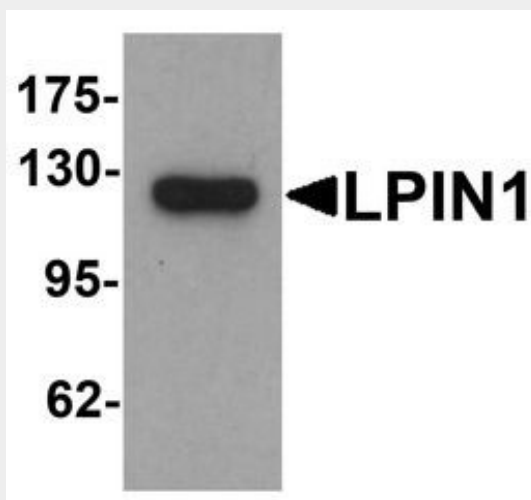
Specifically expressed in skeletal muscle. Also abundant in adipose tissue. Lower levels in some portions of the digestive tract.

#### LPIN1 / Lipin 1 Antibody (C-Terminus) - Protocols

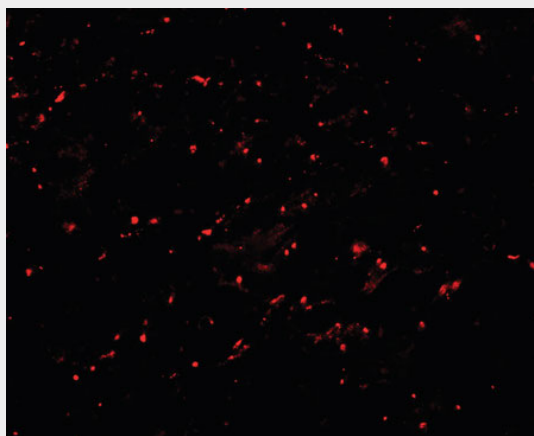
Provided below are standard protocols that you may find useful for product applications.

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

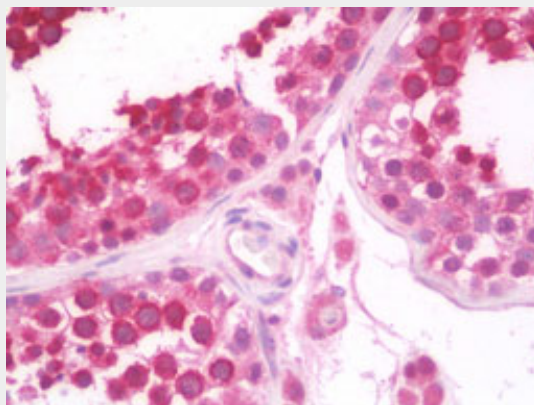
#### LPIN1 / Lipin 1 Antibody (C-Terminus) - Images



Western blot analysis of LPIN1 in K562 cell lysate with LPIN1 antibody at 1 ug/ml.



Immunofluorescence of LPIN1 in human small intestine tissue with LPIN1 antibody at 20 ug/ml.



Anti-LPIN1 / Lipin 1 antibody IHC staining of human testis.

#### **LPIN1 / Lipin 1 Antibody (C-Terminus) - Background**

Plays important roles in controlling the metabolism of fatty acids at different levels. Acts as a magnesium-dependent phosphatidate phosphatase enzyme which catalyzes the conversion of phosphatidic acid to diacylglycerol during triglyceride, phosphatidylcholine and phosphatidylethanolamine biosynthesis in the reticulum endoplasmic membrane. Acts also as a nuclear transcriptional coactivator for PPARGC1A/PPARA to modulate lipid metabolism gene expression (By similarity). Is involved in adipocyte differentiation. May also be involved in mitochondrial fission by converting phosphatidic acid to diacylglycerol (By similarity).

#### **LPIN1 / Lipin 1 Antibody (C-Terminus) - References**

- Nagase T., et al. DNA Res. 3:17-24(1996).
- Ota T., et al. Nat. Genet. 36:40-45(2004).
- Hillier L.W., et al. Nature 434:724-731(2005).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
- Donkor J., et al. J. Biol. Chem. 282:3450-3457(2007).