

ARG45948 anti-LSDP5 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes LSDP5
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	LSDP5
Species	Human
Immunogen	Recombinant protein containing to human LSDP5.
Conjugation	Un-conjugated
Alternate Names	Perilipin 5; PLIN5; LSDP5; OXPAT; PAT-1; Perilipin-5; Lipid storage droplet protein 5

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	IHC-P	2-5 µg/ml
	WB	0.25-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	55 kDa	

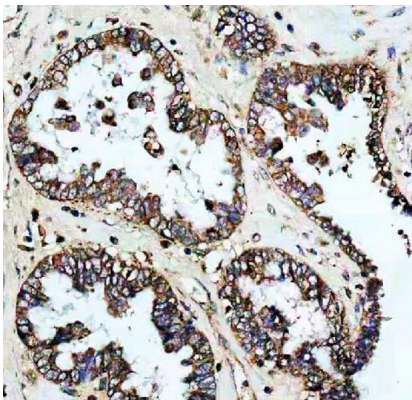
Properties

Form	Liquid
Purification	Affinity chromatography purified
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -22°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

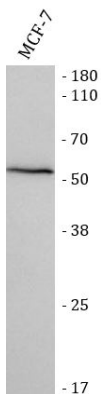
Gene Symbol	PLIN5
Gene Full Name	Perilipin 5
Background	Predicted to enable identical protein binding activity and lipase binding activity. Predicted to be involved in several processes, including negative regulation of peroxisome proliferator activated receptor signaling pathway; positive regulation of triglyceride storage; and regulation of lipid metabolic process. Located in intracellular membrane-bounded organelle and lipid droplet. [provided by Alliance of Genome Resources, May 2025]
Function	Lipid droplet-associated protein that maintains the balance between lipogenesis and lipolysis and also regulates fatty acid oxidation in oxidative tissues. Recruits mitochondria to the surface of lipid droplets and is involved in lipid droplet homeostasis by regulating both the storage of fatty acids in the form of triglycerides and the release of fatty acids for mitochondrial fatty acid oxidation. In lipid droplet triacylglycerol hydrolysis, plays a role as a scaffolding protein for three major key lipolytic players: ABHD5, PNPLA2 and LIPE. Reduces the triacylglycerol hydrolase activity of PNPLA2 by recruiting and sequestering PNPLA2 to lipid droplets. Phosphorylation by PKA enables lipolysis probably by promoting release of ABHD5 from the perilipin scaffold and by facilitating interaction of ABHD5 with PNPLA2. Also increases lipolysis through interaction with LIPE and upon PKA-mediated phosphorylation of LIPE (By similarity). [UniProt]
Calculated Mw	51 kDa
PTM	Phosphoprotein. [UniProt]. [UniProt]
Cellular Localization	Cytoplasm; Lipid droplet; Mitochondrion. [UniProt]

Images



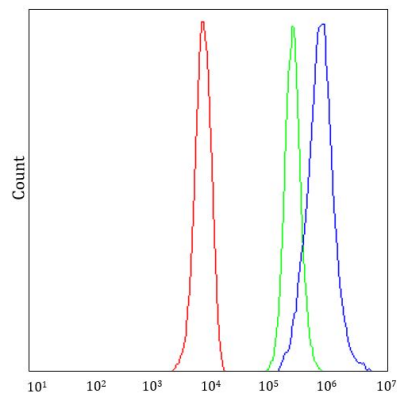
ARG45948 anti-LSDP5 antibody IHC-P image

Immunohistochemistry: Human ovarian cancer stained with ARG45948 anti-LSDP5 antibody at 2 µg/ml dilution.



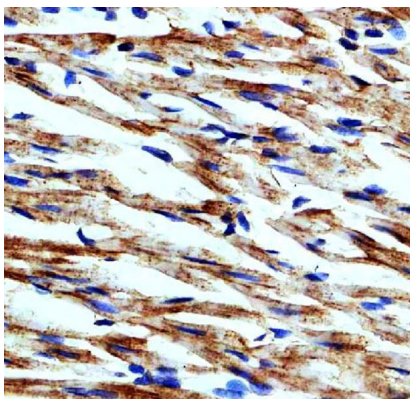
ARG45948 anti-LSDP5 antibody WB image

Western blot: MCF-7 stained with ARG45948 anti-LSDP5 antibody at 0.5 µg/ml dilution.



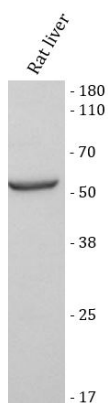
ARG45948 anti-LSDP5 antibody FACS image

Flow Cytometry: HepG2 stained with ARG45948 anti-LSDP5 antibody at $1\text{ }\mu\text{g}/10^6$ cells dilution.



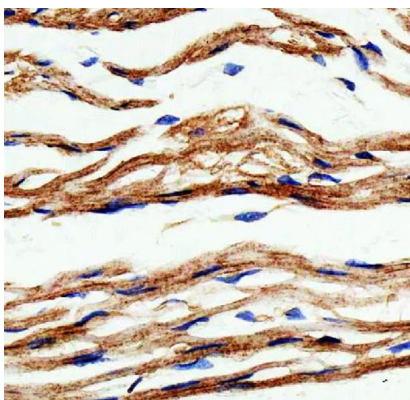
ARG45948 anti-LSDP5 antibody IHC-P image

Immunohistochemistry: Rat heart stained with ARG45948 anti-LSDP5 antibody at $2\text{ }\mu\text{g}/\text{ml}$ dilution.



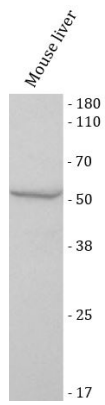
ARG45948 anti-LSDP5 antibody WB image

Western blot: Rat liver stained with ARG45948 anti-LSDP5 antibody at $0.5\text{ }\mu\text{g}/\text{ml}$ dilution.



ARG45948 anti-LSDP5 antibody IHC-P image

Immunohistochemistry: Mouse heart stained with ARG45948 anti-LSDP5 antibody at $2\text{ }\mu\text{g}/\text{ml}$ dilution.



ARG45948 anti-LSDP5 antibody WB image

Western blot: Mouse liver stained with ARG45948 anti-LSDP5 antibody at 0.5 µg/ml dilution.