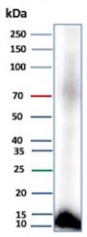
CLPS Antibody / Colipase [clone CLPS/9021] (V5410)

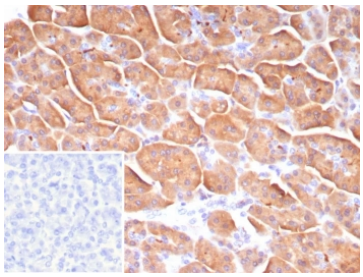
Catalog No.	Formulation	Size
V5410-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5410-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5410SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

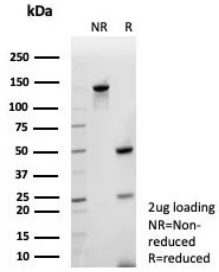
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CLPS/9021
Purity	Protein A/G affinity
UniProt	P04118
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This CLPS antibody is available for research use only.



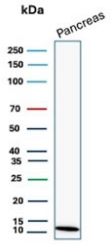
Western blot testing of human pancreas tissue lysate with CLPS antibody (clone CLPS/9021). Predicted molecular weight ~12 kDa.



IHC staining of FFPE human pancreas tissue with CLPS antibody (clone CLPS/9021). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free CLPS antibody (clone CLPS/9021) as confirmation of integrity and purity.



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Description

CLPS is a pancreas-specific enzyme cofactor that facilitates lipid digestion by enabling lipase activity in the presence of bile salts. The CLPS Antibody / Pancreatic Exocrine Secretion Marker is designed to detect this protein in pancreatic tissue. The lipase gene family belongs to one of the most robust genetic superfamilies found in living organisms, which includes esterases and thioesterases. Members of the AB hydrolase subfamily include Hepatic Lipase (HL), Endothelial Lipase (EL), Lipoprotein Lipase (LPL), Pancreatic Lipase (PL), Gastric Lipase (GL) and LCAT. These family members play a crucial role in the metabolism of lipids. Pancreatic lipase, also designated pancreatic triacylglycerol acyl hydrolase, is important for dietary fat absorption as it hydrolyses triglycerides into diglycerides, monoglycerides and free fatty acids. Colipase, also known as CLPS or pancreatic colipase preproprotein, is a 112 amino acid secreted protein that functions as a cofactor of pancreatic lipase. Necessary for dietary lipid hydrolysis and localizing to pancreatic acinar cells, colipase allows pancreatic lipase to anchor itself to the lipid-water interface of lipid micelles, thereby preventing intestinal bile salts from washing it off.

This antibody complements a related Colipase antibody used to study pancreatic digestive enzyme biology.

Application Notes

Optimal dilution of the CLPS antibody should be determined by the researcher.

Immunogen

A recombinant fragment (within amino acids 1-112) of human CLPS protein was used as the immunogen for the CLPS antibody.

Storage

Aliquot the CLPS antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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