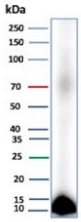
Colipase Antibody / Pancreatic Exocrine Secretion Marker [clone CLPS/9026] (V5412)

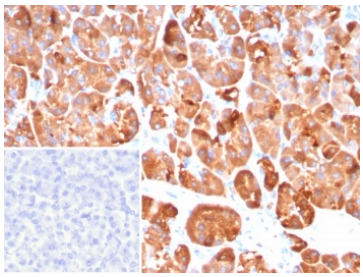
Catalog No.	Formulation	Size
V5412-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5412-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5412SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

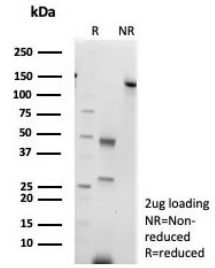
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CLPS/9026
Purity	Protein A/G affinity
UniProt	P04118
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Colipase Antibody / Pancreatic Exocrine Secretion Marker is available for research use only.



Colipase Antibody Human Pancreas WB. Western blot analysis of human pancreas tissue lysate using Colipase antibody. The mouse monoclonal antibody clone CLPS/9026 detects a strong band at approximately 12 kDa, consistent with the predicted molecular weight of Colipase / CLPS. Robust signal in pancreatic tissue reflects expression of this secreted lipase cofactor in acinar cells, supporting its role in exocrine secretion and digestive enzyme function, while minimal background indicates specific target detection.



Colipase Antibody Pancreas IHC. Immunohistochemistry analysis of FFPE human pancreas tissue using Colipase antibody. The mouse monoclonal antibody clone CLPS/9026 shows strong HRP-DAB brown cytoplasmic staining in pancreatic acinar cells, with a granular pattern consistent with Colipase / CLPS localization in secretory compartments. Signal highlights exocrine tissue architecture and reflects active enzyme production and secretion, while surrounding stromal elements show minimal background. A PBS-only control confirms low non-specific staining. HIER: boil tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling prior to staining.



SDS-PAGE analysis of purified, BSA-free Colipase antibody (clone CLPS/9026) as confirmation of integrity and purity.

Description

Colipase (CLPS) is a pancreatic secreted protein that functions as a critical cofactor for pancreatic lipase, enabling efficient digestion of dietary lipids within the gastrointestinal tract. The Colipase Antibody / Pancreatic Exocrine Secretion Marker is designed to detect this protein in pathways associated with pancreatic secretion and digestive enzyme release, where it is synthesized by acinar cells and secreted into the intestinal lumen as part of the exocrine digestive system.

Colipase antibody, also referred to as CLPS antibody or pancreatic colipase antibody in the literature, enables detection of this enzyme cofactor in both tissue and lysate-based assays. In contrast to broader digestive enzyme markers, Colipase provides a more specific readout of exocrine secretion dynamics, reflecting not only protein expression but also the functional output of pancreatic acinar cells. This makes it particularly useful for studying secretion-associated processes rather than general enzyme presence alone.

Functionally, Colipase binds pancreatic lipase and stabilizes its interaction with lipid substrates in the presence of bile salts, facilitating efficient triglyceride hydrolysis. This interaction is essential for proper digestion and absorption of dietary fats. Colipase Antibody is therefore valuable for investigating pancreatic enzyme regulation, secretion efficiency, and digestive physiology under both normal and disease conditions.

CLPS expression is highly restricted to pancreatic acinar cells, where it is produced, processed, and packaged for secretion. In immunohistochemistry, this is reflected by cytoplasmic staining within acinar structures, often with a granular distribution consistent with secretory vesicles. This staining pattern highlights active exocrine function and distinguishes Colipase from proteins with broader tissue distribution.

Subcellularly, Colipase is synthesized in the endoplasmic reticulum and processed through the secretory pathway prior to release. In western blot analysis, it is detected as a low molecular weight protein consistent with its mature secreted form. Detection across pancreatic lysates supports its conserved role in exocrine function, while band specificity provides confidence in target identification.

This Colipase antibody is supported by both western blot and immunohistochemistry data demonstrating detection of CLPS in pancreatic tissue, reinforcing its reliability across applications. Together, these features support its use in studies of pancreatic exocrine secretion, digestive enzyme function, and lipid metabolism.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the Colipase Antibody / Pancreatic Exocrine Secretion Marker should be determined by the researcher.

Immunogen

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

Storage

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

Alternate Names

CLPS antibody, Colipase protein antibody, Pancreatic colipase antibody, Colipase enzyme antibody, CLPS digestive enzyme antibody