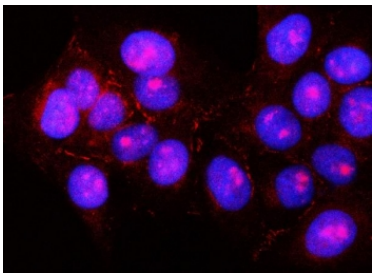
Pancreatic lipase-related protein 2 Antibody / PNLIPRP2 (RQ8076)

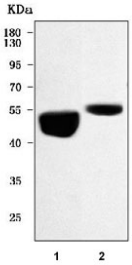
Catalog No.	Formulation	Size
RQ8076	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

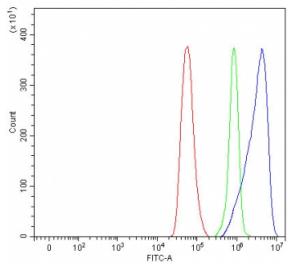
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P54317
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3gu/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Pancreatic lipase-related protein 2 antibody is available for research use only.



Immunofluorescent staining of FFPE human U-2 OS cells with Pancreatic lipase-related protein 2 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) rat pancreas and 2) mouse pancreas tissue lysate with Pancreatic lipase-related protein 2 antibody. Predicted molecular weight ~52 kDa.



Flow cytometry testing of fixed and permeabilized human HeLa cells with Pancreatic lipase-related protein 2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Pancreatic lipase-related protein 2 antibody.

Description

Pancreatic lipase-related protein 2 antibody targets Pancreatic lipase-related protein 2 (PNLIPRP2), a member of the pancreatic lipase family involved in dietary lipid digestion. PNLIPRP2 is primarily expressed in the exocrine pancreas and secreted into the intestinal lumen, where it contributes to the hydrolysis of triglycerides and other lipid substrates. Although structurally related to pancreatic lipase, PNLIPRP2 displays distinct enzymatic properties and substrate preferences, reflecting specialized roles in lipid metabolism. The protein is synthesized in pancreatic acinar cells and follows the secretory pathway, consistent with its function as a digestive enzyme.

Functionally, PNLIPRP2 participates in the breakdown of dietary fats during digestion, supporting nutrient absorption and energy homeostasis. Unlike classical pancreatic lipase, PNLIPRP2 exhibits activity under a broader range of conditions and can act on emulsified lipid substrates with reduced dependence on colipase. These characteristics suggest that PNLIPRP2 may provide complementary lipolytic activity, particularly during early developmental stages or under conditions where classical pancreatic lipase activity is limited. A Pancreatic lipase-related protein 2 antibody supports studies examining digestive enzyme regulation and lipid processing in the gastrointestinal tract.

Expression of PNLIPRP2 is developmentally regulated and shows tissue specificity, with highest levels detected in the pancreas. Its expression pattern reflects the metabolic demands associated with dietary fat intake and digestive capacity. Analysis of PNLIPRP2 expression and localization provides insight into how pancreatic enzymes are regulated in response to nutritional state, developmental stage, and physiological adaptation. Studying PNLIPRP2 contributes to a broader understanding of lipid digestion beyond the canonical pancreatic lipase pathway.

From a biological and disease-relevance perspective, PNLIPRP2 has been investigated in the context of pancreatic function, digestive efficiency, and metabolic health. Alterations in the expression or activity of pancreatic lipase-related proteins may influence fat absorption and nutritional status. PNLIPRP2 is also of interest in studies of pancreatic development and exocrine pancreas disorders, where changes in digestive enzyme expression can reflect underlying physiological or pathological states.

At the molecular level, PNLIPRP2 is encoded by the PNLIPRP2 gene and produces a secreted protein with a molecular weight of approximately 50 kDa, subject to post-translational processing typical of pancreatic enzymes. Structural features conserved within the lipase family support catalytic activity, while sequence differences underlie functional specialization. A Pancreatic lipase-related protein 2 antibody supports research applications focused on digestive enzyme biology, lipid metabolism, and pancreatic physiology, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the Pancreatic lipase-related protein 2 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids D30-C469) was used as the immunogen for the Pancreatic lipase-related protein 2 antibody.

Storage

After reconstitution, the Pancreatic lipase-related protein 2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.