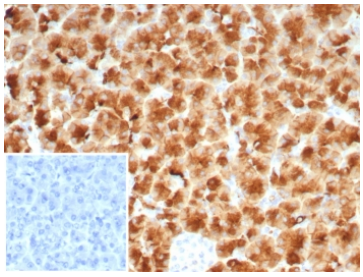
GP2 Antibody Recombinant Mouse MAb rGP2/8617 / Glycoprotein 2 / ZAP75 [clone rGP2/8617] (V4409)

Catalog No.	Formulation	Size
V4409-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4409-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4409SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

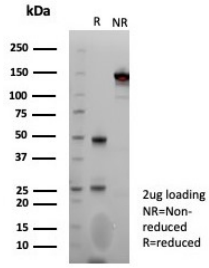
Recombinant | MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rGP2/8617
Purity	Protein A/G affinity
UniProt	P55259
Localization	Cell surface, Secreted, Cytoplasmic
Applications	ELISA: 2-4mg/ml for coating (order BSA-free format) Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This GP2/Glycoprotein 2 antibody is available for research use only.



Immunohistochemistry analysis of GP2 antibody in human pancreas. GP2 Antibody Recombinant mouse MAb rGP2/8617 was used for immunohistochemistry on FFPE human pancreas tissue. Strong HRP-DAB brown cytoplasmic and apical staining is observed in pancreatic acinar epithelial cells, consistent with the known localization of Glycoprotein 2 (GP2) to pancreatic zymogen granule membranes in exocrine pancreas. The staining highlights secretory acinar cell clusters, while surrounding stromal regions show minimal signal. Inset: PBS used in place of primary antibody as a secondary antibody 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 recombinant GP2 antibody (clone rGP2/8617) as confirmation of integrity and purity.

Description

GP2 antibody, also known as Glycoprotein 2 antibody and pancreatic secretory granule membrane glycoprotein antibody, recognizes Glycoprotein 2 (GP2), a heavily glycosylated glycosylphosphatidylinositol-anchored protein encoded by the GP2 gene. GP2 Antibody Recombinant Mouse MAb rGP2/8617 targets this pancreatic exocrine protein that is widely described in the literature as GP2 glycoprotein, pancreatic secretory granule membrane glycoprotein, or zymogen granule membrane glycoprotein GP2. GP2 is strongly expressed in pancreatic acinar epithelial cells where it localizes to the membranes of secretory zymogen granules that store digestive enzymes prior to secretion, making GP2 antibody reagents valuable markers of pancreatic acinar differentiation and secretory granule biology.

Glycoprotein 2 was originally characterized as the major glycoprotein of pancreatic zymogen granule membranes, which explains why it is frequently referred to as pancreatic zymogen granule membrane protein GP2 or pancreatic secretory granule membrane protein GP2 in biochemical and cell biology studies. Within acinar cells, GP2 is associated with the membranes of enzyme-containing granules that accumulate digestive enzymes before regulated exocytosis. During pancreatic secretion, portions of the granule membrane containing GP2 can be released into the pancreatic duct lumen together with digestive enzymes. Because of this biology, Glycoprotein 2 antibody staining typically highlights strong cytoplasmic and apical distribution corresponding to secretory granule membranes within pancreatic acinar cells.

Structurally, GP2 belongs to the uromodulin-like protein family and shares similarities with uromodulin, also known as Tamm-Horsfall protein, a secreted glycoprotein involved in innate immune defense within the kidney. Glycoprotein 2 contains multiple N-linked glycosylation sites and a glycosylphosphatidylinositol anchor that mediates membrane attachment before cleavage or release during secretory processes. The GP2 gene is located on chromosome 16p12 and encodes a protein associated with polarized epithelial secretion and vesicle trafficking. Because of this role, GP2 glycoprotein antibody reagents are frequently used in research examining secretory vesicle formation, intracellular trafficking, and exocrine pancreas biology.

In addition to its pancreatic role, GP2 has been detected on intestinal microfold cells, also known as M cells, located within Peyer's patches and other gut-associated lymphoid tissues. In these epithelial immune sampling cells, GP2 functions as a microbial recognition molecule capable of binding bacterial adhesins expressed by certain enteric pathogens. This interaction facilitates microbial uptake and antigen sampling across the intestinal epithelium, linking GP2 to mucosal immune surveillance. Because of this function, GP2 antibody reagents are also used in studies examining host-microbe interactions and epithelial immune communication in the gastrointestinal tract.

Several strong literature synonyms are associated with this protein, including GP2 glycoprotein, pancreatic secretory granule membrane glycoprotein, pancreatic zymogen granule membrane protein GP2, and zymogen granule membrane glycoprotein GP2. These commonly used names help ensure consistent identification of this pancreatic acinar marker across pancreatic biology and mucosal immunology research. Clone rGP2/8617 is a recombinant mouse monoclonal antibody designed to recognize GP2 protein expression in relevant experimental systems. This GP2 antibody is available from NSJ Bioreagents for investigators studying pancreatic secretion, epithelial polarity, and mucosal immune interactions.

Application Notes

Optimal dilution of the GP2 antibody recombinant mouse mAb rGP2/8617 should be determined by the researcher.

Immunogen

A recombinant fragment of human protein (within amino acids 35-179) was used as the immunogen for the recombinant GP2 antibody.

Storage

Aliquot the GP2/Glycoprotein 2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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