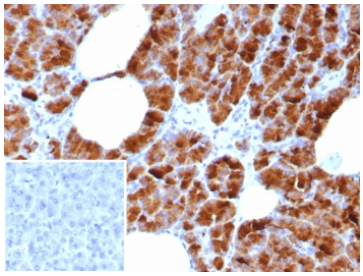
Glycoprotein 2 Antibody Rabbit Monoclonal GP2/8618R / GP2 / ZAP75 [clone GP2/8618R] (V4402)

Catalog No.	Formulation	Size
V4402-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4402-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4402SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

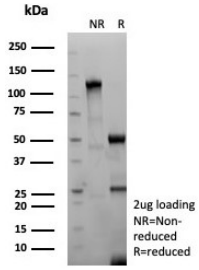
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	GP2/8618R
Purity	Protein A/G affinity
UniProt	P55259
Localization	Cell surface, Secreted, Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This Glycoprotein 2 antibody is available for research use only.



IHC analysis of Glycoprotein 2 antibody in human pancreas. Glycoprotein 2 Antibody Rabbit Monoclonal GP2/8618R 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 the exocrine pancreas. The staining highlights the secretory acinar cell clusters surrounding pancreatic ducts, while stromal areas 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 rabbit monoclonal GP2/Glycoprotein 2 antibody (clone GP2/8618R) 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. Glycoprotein 2 Antibody Rabbit Monoclonal GP2/8618R targets this pancreatic exocrine protein that is most commonly described in the literature as GP2 glycoprotein, pancreatic secretory granule membrane glycoprotein, or zymogen granule membrane glycoprotein GP2. GP2 is highly enriched in pancreatic acinar cells and localizes primarily to the membranes of enzyme-containing secretory granules, also known as zymogen granules, making GP2 antibody reagents useful markers for studies of pancreatic acinar differentiation and secretory granule biology.

Glycoprotein 2 was originally identified 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 literature. Within acinar cells, GP2 is associated with the membrane surface of granules that store digestive enzymes prior to secretion. During stimulated secretion, fragments of the granule membrane containing GP2 may be released into the pancreatic duct lumen together with digestive enzymes. Because of this biology, Glycoprotein 2 antibody staining commonly highlights strong apical and cytoplasmic staining patterns 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 host defense within the urinary tract. Glycoprotein 2 contains multiple N-linked glycosylation sites and a glycosylphosphatidylinositol anchor that mediates membrane attachment prior to cleavage or release during secretory processes. The GP2 gene is located on chromosome 16p12 and encodes a protein that participates in 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 role in pancreatic secretion, GP2 has also been detected on intestinal microfold cells, also known as M cells, 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 bacteria. This interaction contributes to microbial uptake and antigen sampling across the intestinal epithelium, linking GP2 to mucosal immune surveillance. Because of this additional biology, GP2 antibody reagents are also used in studies of intestinal immune interactions and epithelial barrier function.

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 recognition of this pancreatic acinar marker across pancreatic biology and mucosal immunology research. Clone GP2/8618R is a rabbit monoclonal antibody designed to recognize GP2 protein expression in relevant experimental systems. This Glycoprotein 2 antibody is available from NSJ Bioreagents for investigators studying pancreatic secretion, epithelial polarity, and mucosal immune biology.

Application Notes

Optimal dilution of the Glycoprotein 2 antibody rabbit monoclonal GP2/8618R should be determined by the researcher.

Immunogen

A recombinant fragment of human GP2 protein (within amino acids 35-179) was used as the immunogen for the Glycoprotein 2 antibody.

Storage

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

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