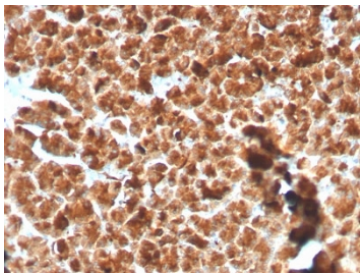
GP2 Antibody Recombinant Rabbit MAb GP2/3134R / Glycoprotein 2 / ZAP75 [clone GP2/3134R] (V7415)

Catalog No.	Formulation	Size
V7415-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7415-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7415SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7415IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

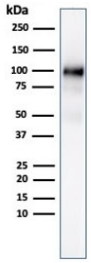
Recombinant RABBIT MONOCLONAL

Bulk quote request

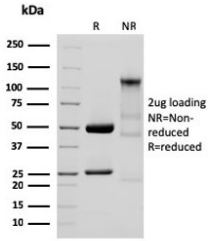
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	GP2/3134R
Purity	Protein A affinity chromatography
UniProt	P55259
Localization	Cytoplasmic, membranous, secreted
Applications	ELISA : 2-4ug/ml (order BSA/azide-free format) Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This GP2/Glycoprotein 2 antibody is available for research use only.



Immunohistochemistry of GP2 Antibody Recombinant Rabbit MAb in human pancreas. Formalin-fixed, paraffin-embedded human pancreas tissue was stained using GP2 Antibody Recombinant Rabbit MAb GP2/3134R. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA. HRP-DAB brown staining highlights pancreatic acinar cells with strong cytoplasmic and apical localization, consistent with the known distribution of Glycoprotein 2 within zymogen granules of exocrine pancreatic cells. Surrounding stromal tissue and pancreatic ductal structures show minimal staining.



Western blot testing of human pancreas lysate with recombinant rabbit monoclonal GP2 antibody (clone GP2/3134R).



SDS-PAGE analysis of purified, BSA-free recombinant Glycoprotein 2/GP2 antibody (clone GP2/3134R) as confirmation of integrity and purity.

Description

Glycoprotein 2 (GP2), encoded by the GP2 gene, is a secretory granule membrane protein most prominently expressed in pancreatic acinar cells. GP2 Antibody recognizes Glycoprotein 2, also referred to in the literature as pancreatic secretory granule membrane major glycoprotein GP2 and zymogen granule membrane glycoprotein 2. This glycosylated membrane protein is a major structural component of pancreatic zymogen granules and contributes to the specialized secretory machinery that supports digestive enzyme production in the exocrine pancreas.

GP2 is synthesized in pancreatic acinar cells and becomes integrated into the membranes of zymogen granules, which store digestive enzymes prior to secretion into the pancreatic ductal system. During enzyme secretion, these granules fuse with the apical plasma membrane, releasing digestive enzymes into the pancreatic ducts. Glycoprotein 2 can subsequently be shed from the granule membrane and released into the pancreatic lumen. Because of this biology, GP2 expression is highly characteristic of pancreatic acinar cells and is closely associated with the presence of mature secretory granules in the exocrine pancreas.

GP2 Antibody Recombinant Rabbit MAb GP2/3134R targets this acinar cell-associated protein for research applications examining pancreatic tissue organization and epithelial differentiation. In histologic specimens, Glycoprotein 2 is typically detected as cytoplasmic and apical staining within pancreatic acinar cells, corresponding to the localization of zymogen granules. This distribution pattern reflects the functional role of GP2 in secretory vesicle biology and helps distinguish acinar cell populations in tissue-based studies.

In addition to its well-established role in pancreatic secretion, GP2 has also been detected in certain epithelial and mucosal environments where it may participate in host-microbe interactions. Studies have shown that GP2 can bind to bacterial components and may function in mucosal immune recognition pathways, particularly in epithelial cells exposed to luminal microbes. These observations suggest that Glycoprotein 2 may contribute not only to digestive enzyme secretion but also to epithelial barrier biology and microbial sensing.

Recombinant Glycoprotein 2 antibody supports the detection of GP2 protein expression in studies of pancreatic physiology, epithelial cell differentiation, and secretory granule biology. Because GP2 expression strongly correlates with pancreatic acinar differentiation, analysis of Glycoprotein 2 expression is frequently used in research focused on pancreatic tissue organization, secretory cell function, and diseases involving the exocrine pancreas.

Application Notes

Optimal dilution of the GP2 antibody recombinant rabbit mAb GP2/3134R should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A partial human recombinant protein corresponding to amino acids 35-179 was used as the immunogen for the GP2/Glycoprotein 2 antibody.

Storage

Store the recombinant GP2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).