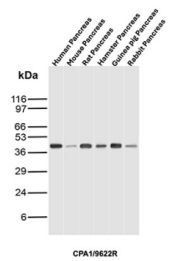
Carboxypeptidase A1 Antibody / CPA1 [clone CPA1/9622R] (V5487)

Catalog No.	Formulation	Size
V5487-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5487-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5487SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

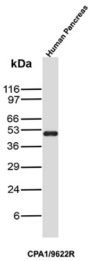
Recombinant RABBIT MONOCLONAL

Bulk quote request

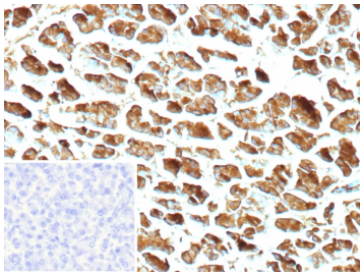
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CPA1/9622R
Purity	Protein A/G affinity
UniProt	P15085
Localization	Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Carboxypeptidase A1 antibody is available for research use only.



Carboxypeptidase A1 Antibody Multi-Species Pancreas WB. Western blot analysis of Carboxypeptidase A1 / CPA1 across multiple species pancreas tissue lysates using rabbit monoclonal Carboxypeptidase A1 antibody, clone CPA1/9622R. Lanes show human pancreas, mouse pancreas, rat pancreas, hamster pancreas, guinea pig pancreas, and rabbit pancreas. A band is detected at approximately 45 kDa in each species, consistent with the predicted molecular weight of CPA1, demonstrating conserved expression of this pancreatic digestive enzyme across mammalian species.



Carboxypeptidase A1 Antibody Pancreas WB. Western blot analysis of Carboxypeptidase A1 / CPA1 in human pancreas tissue lysate using rabbit monoclonal Carboxypeptidase A1 antibody, clone CPA1/9622R. A band is detected at approximately 45 kDa, consistent with the predicted molecular weight of CPA1, reflecting its expression as a digestive enzyme produced by pancreatic acinar cells.



Carboxypeptidase A1 Antibody Pancreas IHC. Immunohistochemistry of Carboxypeptidase A1 / CPA1 in FFPE human pancreas tissue using recombinant rabbit monoclonal Carboxypeptidase A1 antibody, clone CPA1/9622R. Strong HRP-DAB brown cytoplasmic staining highlights pancreatic acinar cells, consistent with the enzymeâ€™s role in digestive protein processing, while nuclei are counterstained blue. The staining pattern shows robust and uniform labeling of acinar cell populations with minimal background signal. Inset: PBS was used in place of primary antibody as a negative control to confirm specificity of staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to staining.

Description

Human pancreatic procarboxypeptidase A exists as three different active forms, two of which are designated carboxypeptidase A1 (CPA1) and carboxypeptidase A2 (CPA2). CPA1, also known as CPA, is a 419 amino acid secreted monomeric protein that is highly expressed in pancreatic tissue. Functioning as a pancreatic exopeptidase, CPA1 uses zinc as a cofactor to catalyze the release of C-terminal amino acids from a variety of proteins, thereby playing a key role in protein digestion and degradation. Via its catalytic activity, CPA1 is also thought to be involved in zymogen (proenzyme) inhibition, probably functioning to block enzyme activation pathways. Abnormal levels of CPA1 are associated with pancreatic cancer, suggesting a possible role in either tumor progression or tumor suppression events.

For additional tissue-specific detection and characterization of CPA1 expression as a pancreatic acinar cell marker, see our Carboxypeptidase A1 antibody clone CPA1/8163R featuring validated IHC and western blot data.

Application Notes

Optimal dilution of the Carboxypeptidase A1 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human CPA1 protein was used as the immunogen for the recombinant Carboxypeptidase A1 antibody.

Storage

Aliquot the Carboxypeptidase A1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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