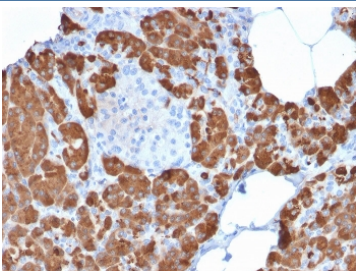


CPA1 Antibody / Carboxypeptidase A1 [clone CPA1/2711] (V7689)

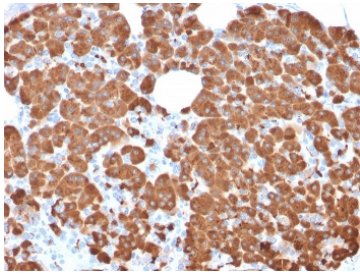
Catalog No.	Formulation	Size
V7689-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7689-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7689SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

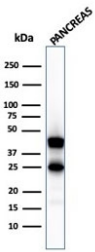
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CPA1/2711
Purity	Protein G affinity chromatography
UniProt	P15085
Localization	Cytoplasmic, secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 1-2ug/ml
Limitations	This Carboxypeptidase A1 antibody is available for research use only.



IHC staining of FFPE human pancreas with CPA1 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

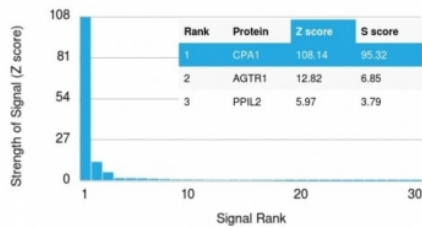


IHC staining of FFPE human pancreas with CPA1 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



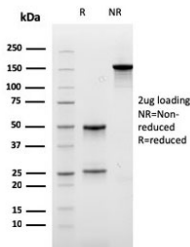
Western blot testing of human pancreas lysate with CPA1 antibody. Predicted molecular weight ~47 kDa.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CPA1 antibody. These results demonstrate the foremost specificity of the CPA1/2711 mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free CPA1 antibody as confirmation of integrity and purity.

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

Full length recombinant human Carboxypeptidase A1 protein was used as the immunogen for the CPA1 antibody.

Storage

Store the Carboxypeptidase A1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).