

Product Datasheet

Carboxypeptidase A1 Antibody / CPA1 (orb2643139)

Catalog Number	orb2643139
Category	Antibodies
Description	<p>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.</p>
Clonality	Monoclonal
Species/Host	Mouse
Isotype	Mouse IgG1, kappa
Conjugation	Unconjugated
Reactivity	Human
Buffer/Preservatives	1 mg/ml in 1X PBS; rAlbumin free, sodium azide free
Purification	Protein G affinity chromatography
Immunogen	Full length recombinant human protein was used as the immunogen for the Carboxypeptidase A1 antibody.

Biorbyt Ltd.

7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom

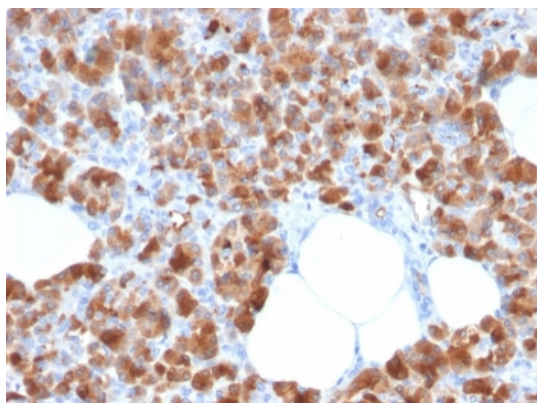
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

Biorbyt LLC

68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713
United States

Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

UniProt ID	P15085
Tested applications	IHC-P, WB
Dilution range	Immunohistochemistry (FFPE): 1-2ug/ml,Western blot: 1-2ug/ml
Application notes	Optimal dilution of the Carboxypeptidase A1 antibody should be determined by the researcher.
Antibody Type	Primary Antibody
Clone Number	CPA1/2713
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Note	For research use only
Expiration Date	12 months from date of receipt.



IHC staining of FFPE human pancreas with Carboxypeptidase A1 antibody (clone CPA1/2713). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

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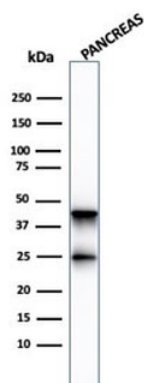
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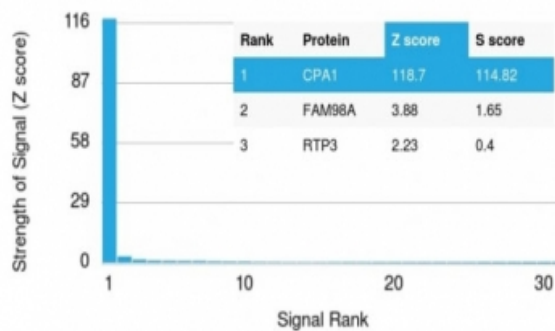
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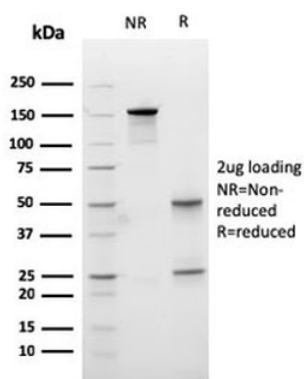


Western blot testing of human pancreas lysate with Carboxypeptidase A1 antibody (clone CPA1/2713). Predicted molecular weight ~47 kDa.

Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19000 full-length human proteins using Carboxypeptidase A1 antibody (clone CPA1/2713). These results demonstrate the foremost specificity of the CPA1/2713 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 Carboxypeptidase A1 antibody (clone CPA1/2713) as confirmation of integrity and purity.

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