Mouse Carboxypeptidase A1/CPA1 Monoclonal Antibody | anti-CPA1 antibody

Carboxypeptidase A1/CPA1 (Pancreatic Cancer Marker)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA214725	**Mouse**	**Human. Others not known.**	**Immunohistochemistry**

PRODUCT SYNONYMS

Carboxypeptidase A1/CPA1; Monoclonal Antibody; Carboxypeptidase A1/CPA1 (Pancreatic Cancer Marker); Carboxypeptidase A1 (pancreatic); CPA1; Pancreatic Carboxypeptidase A1; Procarboxypeptidase A1 pancreatic; anti-CPA1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human. Others not known.
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	CPA1/2714
Specificity	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.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	419
Applicable Applications for anti-CPA1 antibody	IHC (Immunohistochemistry)
Immunogen	Recombinant full-length human CPA1 protein
Positive Control	Pancreas
Cellular Localization	Secreted and Extracellular Space
Chromosome Location	7q32.3
Preparation and Storage	Antibody with azide - store at 2 to 8 degree C. Antibody without azide - store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES

Application Data
Analysis of Protein Array containing more than 19,000 full-length human proteins using Carboxypeptidase A1/CPA1 Mouse Monoclonal Antibody (CPA1/2714). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded human Pancreas stained with Carboxypeptidase A1/CPA1 Mouse Monoclonal Antibody (CPA1/2714).

IHC (Immunohiostchemistry)
Formalin-fixed, paraffin-embedded human Pancreas stained with Carboxypeptidase A1/CPA1 Mouse Monoclonal Antibody (CPA1/2714).

ADDITIONAL INFORMATION

References	Stewart, E.A., et al. 1990. Human carboxypeptidase A identifies a BglII RFLP and maps to 7q31-qter. Am. J. Hum. Genet. 46: 795-800.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502997
NCBI GeneID	1357
NCBI Accession #	NP_001859.1
NCBI GenBank Nucleotide #	NM_001868.3
UniProt Accession #	P15085; Q53XU0; Q9BS67; Q9UCF2; A4D1M1
Molecular Weight	47kDa
NCBI Official Full Name	carboxypeptidase A1 preproprotein
NCBI Official Synonym Full Names	carboxypeptidase A1
NCBI Official Symbol	CPA1
NCBI Official Synonym Symbols	CPA
NCBI Protein Information	carboxypeptidase A1
UniProt Protein Name	Carboxypeptidase A1
UniProt Gene Name	**CPA1**
UniProt Synonym Gene Names	CPA

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