

Datasheet for ABIN1713752
anti-CPA3 antibody (AA 101-200)[Go to Product page](#)

1 Image

1 Publication

Overview

Quantity:	100 µL
Target:	CPA3
Binding Specificity:	AA 101-200
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CPA3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunocytochemistry (ICC), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human CPA3/MC-CPA
Isotype:	IgG
Cross-Reactivity:	Rat
Predicted Reactivity:	Human,Mouse
Purification:	Purified by Protein A.

Target Details

Target:	CPA3
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Target Details

Alternative Name:	CPA3/MC-CPA (CPA3 Products)
Background:	<p>Synonyms: carboxypeptidase A, Carboxypeptidase A3, carboxypeptidase A3 mast cell, CBPA3_HUMAN, Cpa3, Mast cell carboxypeptidase A, mast cell carboxypeptidase A3, MC CPA, MC-CPA.</p> <p>Background: Carboxypeptidase A (CPA) is a pancreatic exopeptidase which hydrolyses the peptide bond adjacent to the C-terminal end in polypeptide chains. Mast cell carboxypeptidase A (MC-CPA), a part of the peptidase M14 family, is a highly conserved metalloprotease localized to the secretory granules, along with tryptases and chymases. MC-CPA is stored as an active enzyme in the granule and is released, along with other inflammatory mediators, upon mast cell degranulation. MC-CPA mirrors pancreatic carboxypeptidase A in cleaving COOH-terminal aromatic and aliphatic amino acid residues. The optimum pH of MC-CPA is between neutral and basic, depending upon the substrate. The MC-CPA gene, CPA3, resides on chromosome 3 and contains 11 exons.</p>
Gene ID:	1359
Pathways:	Peptide Hormone Metabolism, Regulation of Systemic Arterial Blood Pressure by Hormones

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200 ICC 1:100-500
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin

Handling

Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:	Mancini, Gohlke, Garcia-Carrizo, Zagoriy, Stephanowitz, Schulz: "Identification of biomarkers of brown adipose tissue aging highlights the role of dysfunctional energy and nucleotide metabolism pathways." in: Scientific reports , Vol. 11, Issue 1, pp. 19928, (2021) (PubMed).
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Images

Immunofluorescence

Image 1. Immunofluorescence analysis of cells expressing mast cell marker carboxypeptidase A3 (CPA3) in BAT-sections of young (2.5 months, left panel; n = 8) and aged mice (25 months; middle panel, n = 8) and subsequent cell count-based quantification (right panel) of stained mast cells (green signal, white arrows) normalized to total section area using sections of BAT. For each animal, 1–2 independent tissue sections per animal were assessed. Images were collected at 600-fold magnification (scale bar: 10 μ m). Source: PMID34620947

