

Datasheet for 100-4152**Carboxypeptidase A Antibody****Overview**

Description:	Anti-Carboxypeptidase A (RABBIT) Antibody - 100-4152
Item No.:	100-4152
Size:	2 mL
Applications:	FISH, Multiplex, WB
Reactivity:	Bovine
Host Species:	Rabbit

Product Details

Background:	Anti-Carboxypeptidase A antibody is specific for Carboxypeptidase A enzyme. Carboxypeptidase A is a pancreatic exopeptidase which hydrolyzes peptide bonds of C-terminal residues with aromatic or aliphatic side chains. This enzyme is also commonly called CPA1, where a related pancreatic carboxypeptidase is CPA2 . There are several related enzymes referred to as CPA 3 through CPA6.
Synonyms:	rabbit anti-Carboxypeptidase A Antibody, Carboxypeptidase A1 precursor antibody, CPA1 antibody, Pancreatic carboxypeptidase A1 antibody, Procarboxypeptidase A1 pancreatic antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	CPA1
Reactivity:	Bovine
Immunogen Type:	Native Protein
Immunogen:	Carboxypeptidase A [Bovine Pancreas]

Purity/Specificity: Carboxypeptidase A antibody was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, purified and partially purified Carboxypeptidase A [Bovine Pancreas]. Cross reactivity against Carboxypeptidase A from other tissues and species may occur but have not been specifically determined.

Relevant Links:

- [UniProtKB - P00730](#)
- [NCBI - NP_777175.1](#)
- [GeneID - 286762](#)

Application Details

Suggested Applications: FISH, Multiplex, WB (Based on references)

Application Note: Carboxypeptidase A Antibody is suitable in ELISA and western blot. Optimization for specific immunoassays should be determined by the researcher.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:5,000 - 1:25,000

IHC: User Optimized

WB: 1:500 - 1:3,000

Formulation

Physical State: Lyophilized

Concentration: 90 mg/mL by Refractometry

Buffer: 0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: None

Stabilizer: None

Reconstitution Volume: 2.0 mL

Reconstitution Buffer: Restore with deionized water (or equivalent)

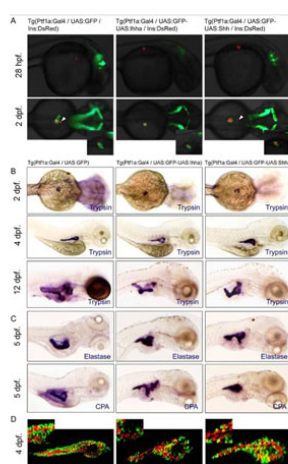
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Fluorescence in situ Hybridization (FISH)

ISH results using Anti-Carboxypeptidase A Antibody. (A) Fluorescence images showing the endocrine (RFP) and exocrine pancreas (GFP). When each transgenic fish is crossed with *Ins-DsRed* zebrafish, the development of insulin-expressing endocrine pancreas is not impaired by Hh over-expression. A smaller dot-like insulin-positive structure (white arrowheads) which corresponds to the anterior endocrine cells is observed in approximately half of the control and Hh-expressing embryos. (B, C) Whole mount ISH for trypsin, elastase, and carboxypeptidase A (CPA) at different time points. Over-expression of Hh ligands does not compromise the exocrine differentiation of the zebrafish pancreas, as evidenced by the proper and timely expression of trypsin. Expression of the other exocrine markers is also unaffected by Hh over-expression. Hh over-expression, however, induces subtle morphologic changes of the exocrine pancreas, showing a short, slender, and tortuous posterior pancreas compared to those of controls, which is evident by ISH for exocrine markers at 4 and 5 dpf and exaggerated at 12 dpf. (D) Confocal images of immunofluorescence staining for CPA. Regardless of transgene (GFP) expression, most acinar cells express CPA, suggesting unaffected exocrine differentiation by Hh over-expression. Lat., lateral. Fig. 2. PMID: 22164219.

References

- Jung, IH et al. Aberrant Hedgehog ligands induce progressive pancreatic fibrosis by paracrine activation of myofibroblasts and ductular cells in transgenic zebrafish. *PLoS One* (2012)
- Zhang P et al. The PERK eukaryotic initiation factor 2 α kinase is required for the development of the skeletal system, postnatal growth, and the function and viability of the pancreas. *Mol Cell Biol.* (2002)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.