

# Product Datasheet

## Pancreatic Polypeptide/PP Antibody NB100-1793

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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Updated 10/23/2024 v.20.1

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**NB100-1793****Pancreatic Polypeptide/PP Antibody**

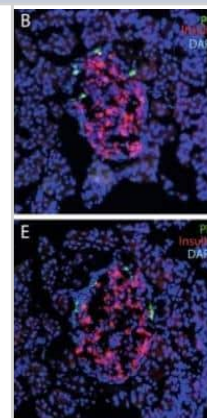
Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA

Product Description	
Host	Goat
Gene ID	5539
Gene Symbol	PPY
Species	Human, Mouse, Rat, Monkey
Reactivity Notes	Monkey and Mouse reactivity reported from verified customer reviews.
Immunogen	Peptide with sequence C-TRPRYGKRHKEDT corresponding to internal region according to NP_002713.1.

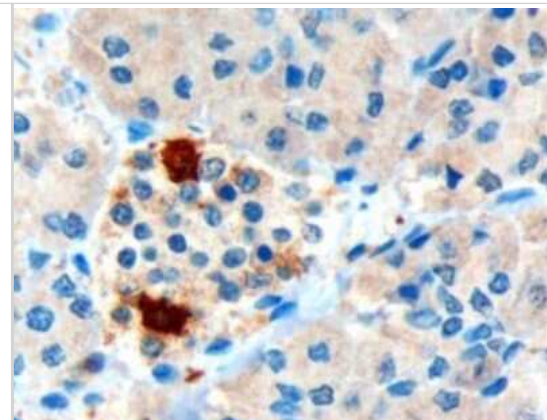
Product Application Details	
Applications	Flow Cytometry, Immunoblotting, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Peptide ELISA
Recommended Dilutions	Flow Cytometry, Immunohistochemistry 5 ug/mL, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 3 ug/ml, Immunohistochemistry-Frozen 1:500, Immunoblotting, Peptide ELISA Detection limit 1:32000
Application Notes	Use in Immunocytochemistry/immunofluorescence reported in scientific literature (PMID: 23221614). Use in immunoblotting reported in scientific literature (PMID: 27572106).

**Images**

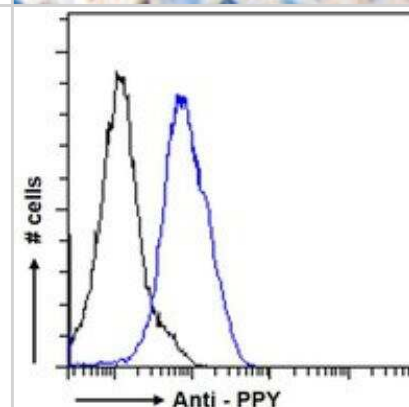
Immunocytochemistry/Immunofluorescence: Pancreatic Polypeptide/PP Antibody [NB100-1793] - Histologic comparison of wild type and *Seriola dumerili* mouse pancreata. *Seriola dumerili* Ins2 mice (bottom) have normal islet morphology and cyto-architecture compared to littermates with endogenous mouse Ins 1 and Ins 2 (top); pancreatic polypeptide (green; B,E). Scale bar: 100 um. Image collected and cropped by CiteAb from the following publication ([www.nature.com/articles/s41598-019-40768-3](http://www.nature.com/articles/s41598-019-40768-3)) licensed under a CC-BY license.



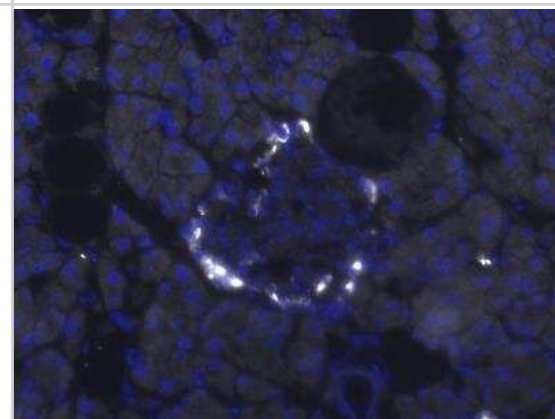
**Immunohistochemistry-Paraffin: Pancreatic Polypeptide/PP Antibody [NB100-1793]** - Staining of paraffin embedded Human Pancreas with antibody at 3 ug/mL. Microwaved antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.



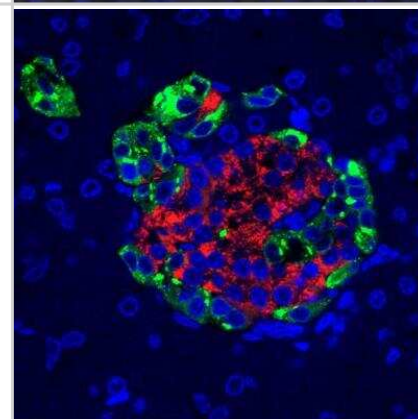
**Flow Cytometry: Pancreatic Polypeptide/PP Antibody [NB100-1793]** - Flow cytometric analysis of paraformaldehyde fixed U2OS cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (1 ug/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



**Immunohistochemistry-Frozen: Pancreatic Polypeptide/PP Antibody [NB100-1793]** - Analysis of Pancreatic Polypeptide in mouse adult pancreas tissue. IHC-Fr image submitted by a verified customer review.

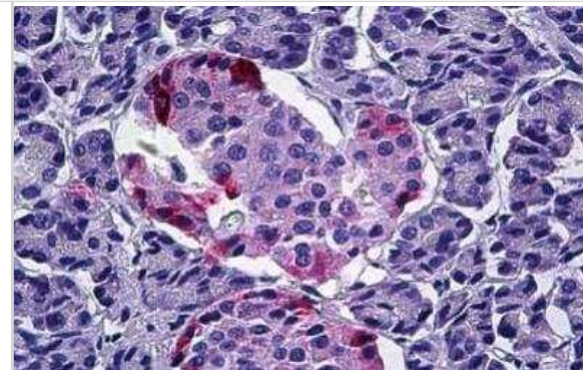


**Immunohistochemistry-Paraffin: Pancreatic Polypeptide/PP Antibody [NB100-1793]** - Adult macaque pancreas paraffin sections following standard protocols. IHC-P image submitted by a verified customer review.

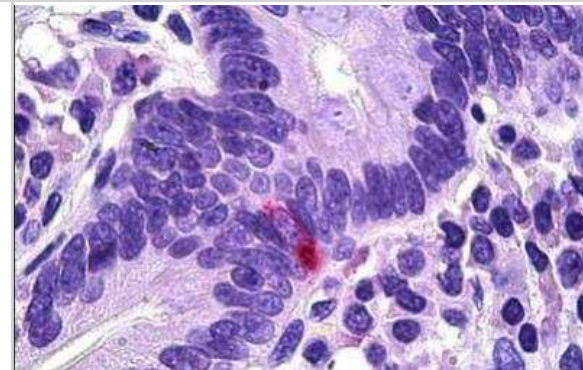




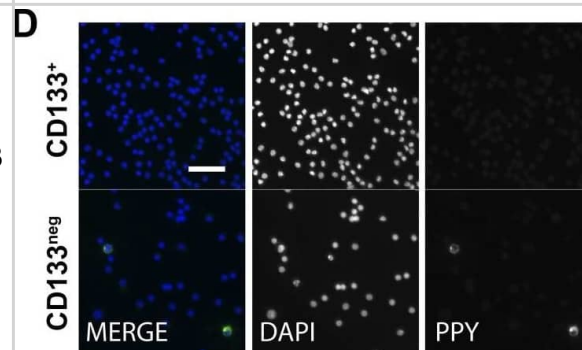
Immunohistochemistry-Paraffin: Pancreatic Polypeptide/PP Antibody [NB100-1793] - Staining of paraffin embedded Human Pancreas with antibody at 5 ug/mL. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



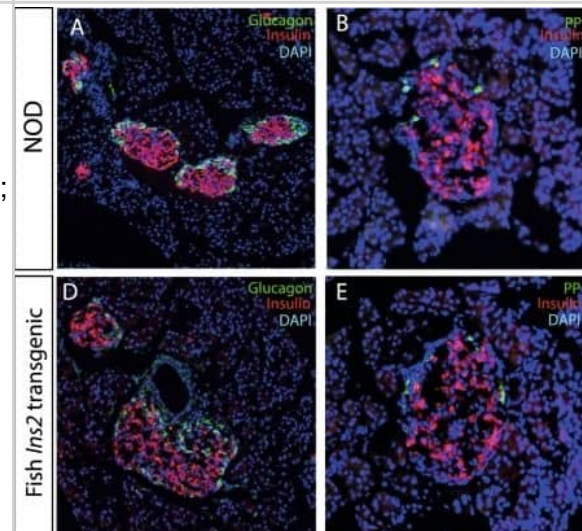
Immunohistochemistry-Paraffin: Pancreatic Polypeptide/PP Antibody [NB100-1793] - Staining of paraffin embedded Human Intestine with antibody at 5 ug/mL. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



Immunohistochemistry: Pancreatic Polypeptide/PP Antibody [NB100-1793] - Sorted CD133+ cells originate from pancreatic ducts.(A) Schematic diagram of the experimental procedure. Dissociated pancreatic cells were embedded & cultured as previously described (Lawson et al., 2007). Scale bar, 200  $\mu$ m. (B) Confocal images of CD133 (green) & CPA1 (red) co-staining in adult human pancreas tissue. Scale bar, 20  $\mu$ m. (C) CEL expression profiles of FACS-sorted human adult pancreatic cells & isolated islets (islet values normalized to 1). Data are presented as mean  $\pm$  SEM (n=3). (D) Representative immunostaining pictures of sorted cells. Scale bar, 50  $\mu$ m.DOI:<http://dx.doi.org/10.7554/eLife.00940.005> Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/24252877>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: Pancreatic Polypeptide/PP Antibody [NB100-1793] - Histologic comparison of wild type & *Seriola dumerili* mouse pancreata. *Seriola dumerili* Ins2 mice (bottom) have normal islet morphology & cyto-architecture compared to littermates with endogenous mouse Ins 1 & Ins 2 (top); insulin (red A–F), glucagon (green; A,D), pancreatic polypeptide (green; B,E), & somatostatin (green; C,F). G, H: Beta cell ultra-structure of NOD & *Seriola dumerili* Ins2 transgenic. Both NOD (G) & *Seriola dumerili* Ins2 transgenic (H) islets contain insulin granules (yellow arrow), though *Seriola dumerili* Ins2 transgenic insulin granules are lighter in staining intensity compared to the NOD (n = 4; zoom in; inset). (I,J) Insulinitis scoring pancreata from 12–15 weeks old NOD & *Seriola dumerili* Ins2 transgenics (n = 4 per group). Scale bar: 100  $\mu$ m. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/30899071>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Tixi W, Maldonado M, Chang YT et al. Coordination between ECM and cell-cell adhesion regulates the development of islet aggregation, architecture, and functional maturation *eLife* 2023-08-23 [PMID: 37610090]

Wang S The cell autonomous and cell non-autonomous roles of YAP1 during pancreatogenesis Thesis 2023-01-01

van Gurp L, Fodouliau L, Oropeza D et al. Generation of human islet cell type-specific identity genesets *Nature communications* [PMID: 35440614] (IHC-P, Human)

Rovira M, Maestro Ma, Grau V, Ferrer J Hnf1b-CreER causes efficient recombination of a Rosa26-RFP reporter in duct and islet delta cells *Islets* 2021-07-20 [PMID: 34282714]

Tang X, Uhl S, Zhang T et al. SARS-CoV-2 infection induces beta cell transdifferentiation *Cell Metabolism* 2021-05-01 [PMID: 34081913] (Human)

Foo KS, Skowronski AA, Baum D et al. Transgenic substitution with Greater Amberjack *Seriola dumerili* fish insulin 2 in NOD mice reduces beta cell immunogenicity *Sci Rep* 2019-03-21 [PMID: 30899071] (IHC-P, Mouse)

Hara A, Nakagawa Y, Nakao K et al. Development of monoclonal mouse antibodies that specifically recognize pancreatic polypeptide *Endocr. J.* 2019-03-06 [PMID: 30842364] (ICC/IF, Human)

Hull RL, Gibson RL, McNamara S et al. Islet Interleukin-1beta Immunoreactivity Is an Early Feature of Cystic Fibrosis That May Contribute to beta-Cell Failure. *Diabetes Care* 2018-04-01 [PMID: 29437698] (Human)

Lu TT, Heyne S, Dror E et al. The Polycomb-Dependent Epigenome Controls b Cell Dysfunction, Dedifferentiation, and Diabetes *Cell Metab.* 2018-06-05 [PMID: 29754954] (IF/IHC, Mouse)

Kim-Muller Jy, Fan J, Kim Yj et al. Aldehyde dehydrogenase 1a3 defines a subset of failing pancreatic beta cells in diabetic mice. *Nat Commun* 2016-08-30 [PMID: 27572106] (IF/IHC, IB)

Cinti F, Bouchi R, Kim-Muller JY et al. Evidence of B-cell Dedifferentiation in Human Type 2 Diabetes. *J. Clin. Endocrinol. Metab.* 2015-12-29 [PMID: 26713822] (IHC-Fr, Human)

Badman MK, Flier JS. The gut and energy balance: visceral allies in the obesity wars. *Science* 2005-03-25 [PMID: 15790843]

More publications at <http://www.novusbio.com/NB100-1793>





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### **Products Related to NB100-1793**

NB100-1793PEP	Pancreatic Polypeptide/PP Peptide
HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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