

**Anti-PC1/3 Antibody**  
**Catalog # ABO11391****Specification****Anti-PC1/3 Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P29120</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Neuroendocrine convertase 1(PCS1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PC1/3 Antibody - Additional Information****Gene ID 5122****Other Names**

Neuroendocrine convertase 1, NEC 1, 3.4.21.93, Prohormone convertase 1, Proprotein convertase 1, PC1, PCSK1, NEC1

**Calculated MW**

84152 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Cytoplasmic vesicle, secretory vesicle. Localized in the secretion granules.

**Protein Name**

Neuroendocrine convertase 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human PC1/3(726-740aa DVFYNTKPYKHRDDR), identical to the related mouse and rat sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the peptidase S8 family. Furin subfamily.

**Anti-PC1/3 Antibody - Protein Information**

**Name** PCSK1

**Synonyms** NEC1

**Function**

Involved in the processing of hormone and other protein precursors at sites comprised of pairs of basic amino acid residues. Substrates include POMC, renin, enkephalin, dynorphin, somatostatin, insulin and AGRP.

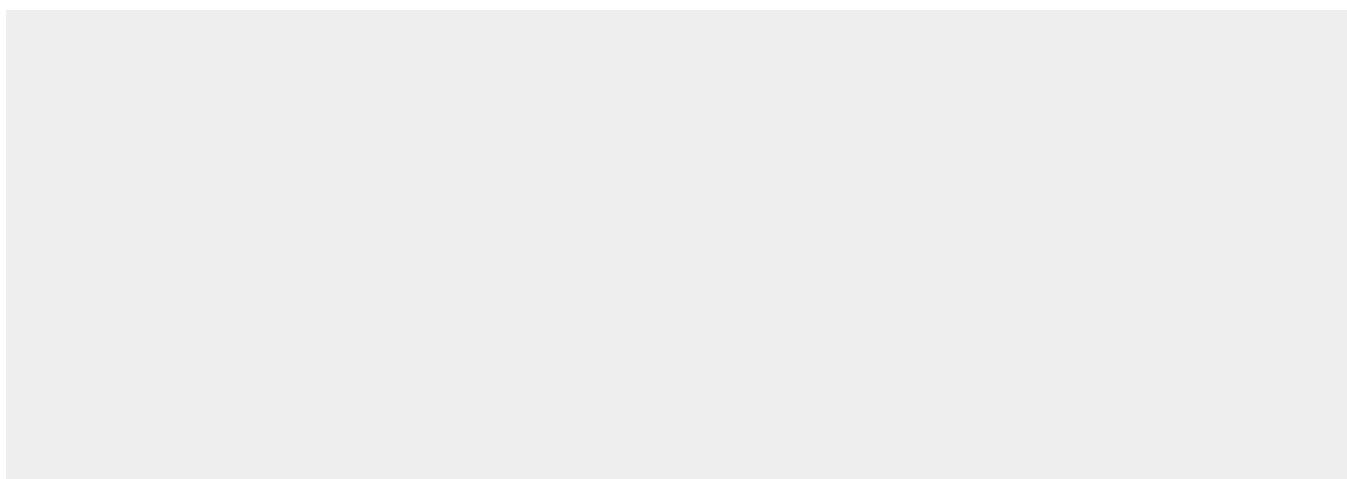
**Cellular Location**

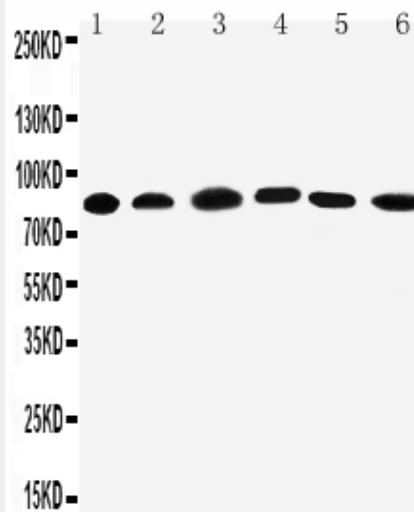
Cytoplasmic vesicle, secretory vesicle. Note=Localized in the secretion granules

**Anti-PC1/3 Antibody - Protocols**

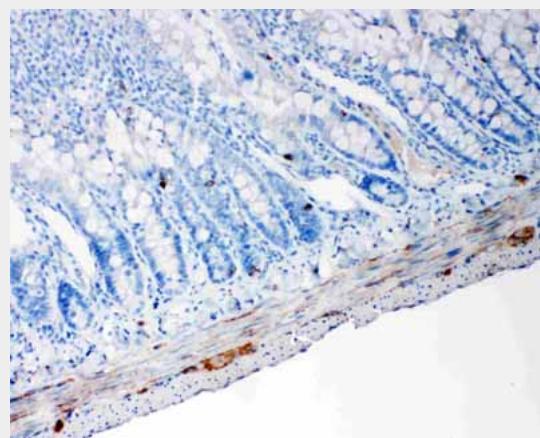
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-PC1/3 Antibody - Images**



Anti-PC1/3 antibody, ABO11391, Western blottingLane 1: Rat Liver Tissue LysateLane 2: Rat Thymus Tissue LysateLane 3: A549 Cell LysateLane 4: HEA Cell LysateLane 5: COLO320 Cell LysateLane 6: PANC Cell Lysate



Anti-PC1/3 antibody, ABO11391, IHC(P)IHC(P): Rat Intestine Tissue

#### Anti-PC1/3 Antibody - Background

PCSK1(Proprotein Convertase, Subtilisin/Kexin-Type, 1), also known as PC1 or NEC1, is an enzyme that in humans is encoded by the PCSK1 gene. Proprotein convertase-1 is a neuroendocrine convertase that belongs to a family of subtilisin-like serine endoproteases that process large precursor proteins into mature bioactive products. By *in situ* hybridization, Seidah et al.(1991) mapped the NEC1 gene to human chromosome 5q15-q21 and mouse chromosome 13. Ohagi et al.(1996) noted that PC1 initiates the sequential processing of proinsulin to insulin by cleaving the proinsulin molecule on the C-terminal side of the dibasic peptide, arg31-arg32, joining the B-chain and C-peptide. By observing the phenotypic features in patients with PC1 mutations, Jackson et al.(2003) concluded that human intestinal absorptive function is dependent on PC1 activity.