

**Anti-PC1/3 Antibody**  
Catalog # ABO11391

**Specification**

---

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

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

**Description**

Rabbit IgG polyclonal antibody for Neuroendocrine convertase 1(PCSK1) 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 reconstitution, 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

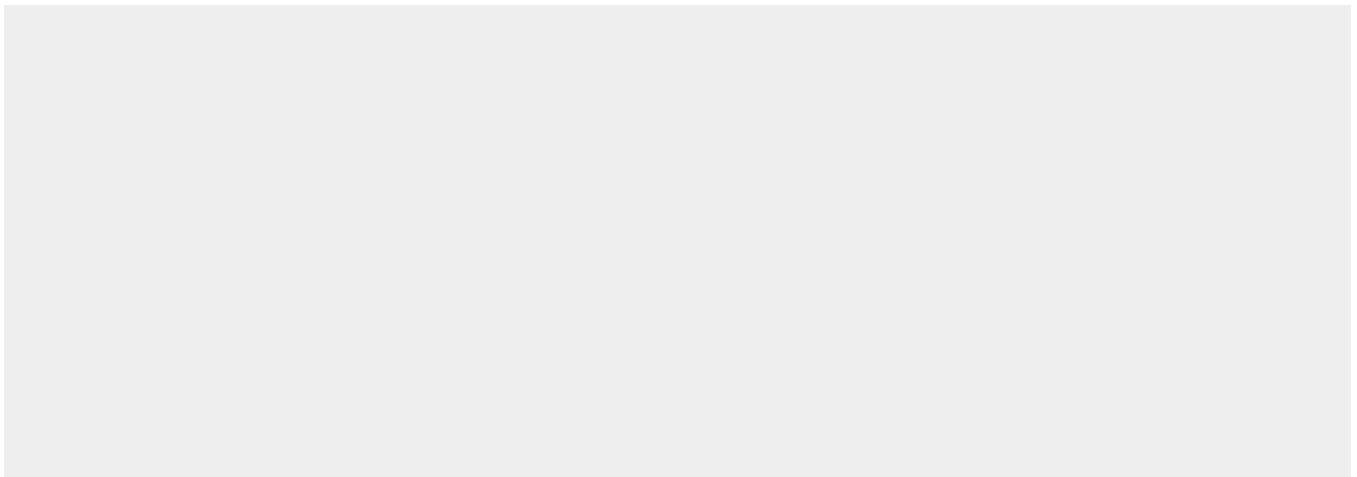
Cytoplasmic vesicle, secretory vesicle. Note=Localized in the secretion granules

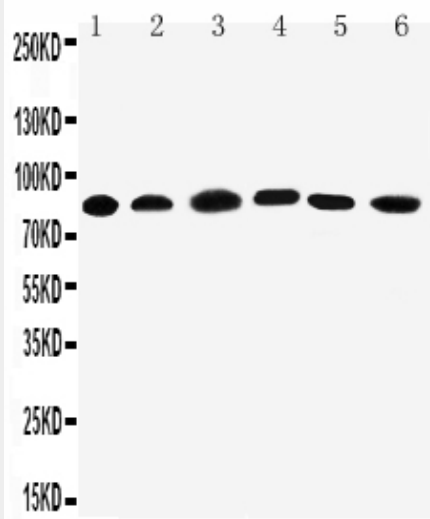
## Anti-PC1/3 Antibody - Protocols

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

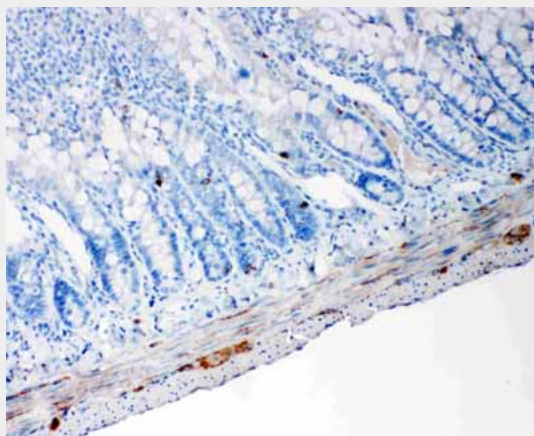
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-PC1/3 Antibody - Images





Anti-PC1/3 antibody, ABO11391, Western blotting  
 Lane 1: Rat Liver Tissue Lysate  
 Lane 2: Rat Thymus Tissue Lysate  
 Lane 3: A549 Cell Lysate  
 Lane 4: HELA Cell Lysate  
 Lane 5: COLO320 Cell Lysate  
 Lane 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.