10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-PC1/3 Antibody
Catalog # ABO11391

Specification

Anti-PC1/3 Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P29120
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

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
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

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 Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

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 Cytomety
- Cell Culture

Anti-PC1/3 Antibody - Images

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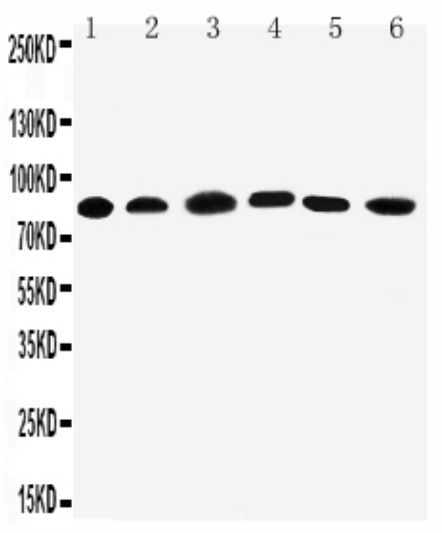
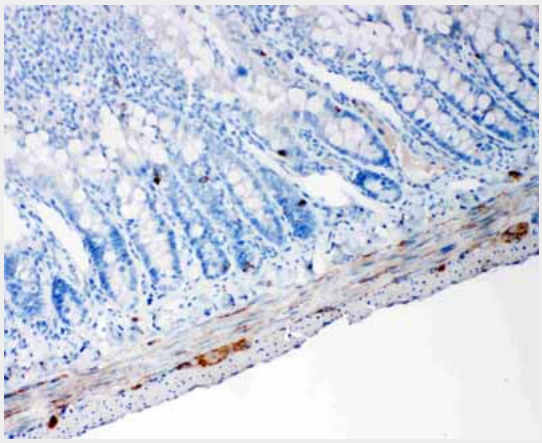


Anti-PC1/3 antibody, ABO11391, Western blottingLane 1: Rat Liver Tissue LysateLane 2: Rat Thymus Tissue LysateLane 3: A549 Cell LysateLane 4: HELA Cell LysateLane 5: COLO320 Cell LysateLane 6: PANC Cell Lysate



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.