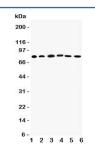


# **Proprotein Convertase 1/3 Antibody (R31196)**

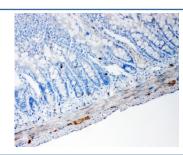
Catalog No.	Formulation	Size
R31196	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

## **Bulk quote request**

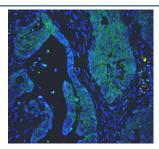
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P29120
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunofluorescence (FFPE) : 1-2ug/ml
Limitations	This Proprotein Convertase 1/3 antibody is available for research use only.



Western blot testing of Proprotein Convertase 1/3 antibody; Lane 1: rat liver; 2: (r) thymus; and human samples 3: A549; 4: HeLa; 5: COLO320; 6: PANC cell lysate



IHC staining of FFPE rat intestine tissue with Proprotein Convertase 1/3 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human colon cancer with Proprotein Convertase 1/3 antibody (green) and DAPI nuclear counterstain (blue). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.

### **Description**

Proprotein Convertase, Subtilisin/Kexin-Type, 1, also known as PC1 or NEC1, is an enzyme that in humans is encoded by the PCSK1 gene. It 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 gene to human chromosome 5q15-q21 and mouse chromosome 13. Ohagi et al.(1996) noted that PCSK1 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 PCSK1 mutations, Jackson et al.(2003) concluded that human intestinal absorptive function is dependent on the enzymes activity.

### **Application Notes**

The stated application concentrations are suggested starting amounts. Titration of the Proprotein Convertase 1/3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

### **Immunogen**

An amino acid sequence from the C-terminus of human Proprotein Convertase 1/3 (DVFYNTKPYKHRDDR) was used as the immunogen for this Proprotein Convertase 1/3 antibody (100% homologous in human, mouse and rat).

#### **Storage**

After reconstitution, the Proprotein Convertase 1/3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.