

### PCSK4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16878A

## **Specification**

## PCSK4 Antibody (N-term) - Product Information

WB,E Application **Primary Accession** 06UW60 Other Accession NP 060043.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 82795 Antigen Region 168-196

### PCSK4 Antibody (N-term) - Additional Information

#### **Gene ID 54760**

#### **Other Names**

Proprotein convertase subtilisin/kexin type 4, 3421-, Proprotein convertase 4, PC4, PCSK4 {ECO:0000312|EMBL:AAH363541}

### Target/Specificity

This PCSK4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-196 amino acids from the N-terminal region of human PCSK4.

### **Dilution**

WB~~1:1000

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

PCSK4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### PCSK4 Antibody (N-term) - Protein Information

Name PCSK4 {ECO:0000312|EMBL:AAH36354.1}

Function Proprotein convertase involved in the processing of hormone and other protein



precursors at sites comprised of pairs of basic amino acid residues (By similarity). In males, important for ADAM2 processing as well as other acrosomal proteins with roles in fertilization and critical for normal fertilization events such as sperm capacitation, acrosome reaction and binding of sperm to zona pellucida (By similarity). Also plays a role in female fertility, involved in the regulation of trophoblast migration and placental development, may be through the proteolytical processing and activation of proteins such as IGF2 (PubMed: 16040806). May also participate in folliculogenesis in the ovaries (By similarity).

### **Cellular Location**

Membrane; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, acrosome membrane {ECO:0000250|UniProtKB:P29121}

**Tissue Location** 

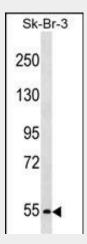
Placenta..

### PCSK4 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### PCSK4 Antibody (N-term) - Images



PCSK4 Antibody (N-term) (Cat. #AP16878a) western blot analysis in SK-BR-3 cell line lysates (35ug/lane). This demonstrates the PCSK4 antibody detected the PCSK4 protein (arrow).

#### PCSK4 Antibody (N-term) - Background

Proprotein convertases, including PCSK4, are calcium-dependent serine proteases related to bacterial subtilisins and to yeast kexin. These enzymes process precursor proteins to their active forms by selective cleavage of the polypeptide at sites following paired basic amino acids. In mammals, this family





comprises PC1 (MIM 162150), PC2 (MIM 162151), PC4, PC5 (MIM 600488), furin (FUR; MIM 136950), and PACE4 (MIM 167405). Substrates for these enzymes range from prohormones to precursors for growth factors to cell surface receptors and viral surface glycoproteins (Cao et al., 2001 [PubMed 11776387]).[supplied by OMIM].

# PCSK4 Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care (2010) In press: Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Batta, K., et al. J. Mol. Biol. 385(3):788-799(2009) Qiu, Q., et al. Proc. Natl. Acad. Sci. U.S.A. 102(31):11047-11052(2005) Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003)