PRODUCT INFORMATION



PCSK9 (human) Polyclonal Antibody

Item No. 10240

Overview and Properties

This vial contains 500 µg of protein A-purified polyclonal antibody. Contents:

Synonyms: NARC-1, Proprotein Convertase Subtilisin Kexin 9

Immunogen: Purified recombinant human PCSK9

Species Reactivity: (+) Human, mouse, and rat

Q8NBP7 **Uniprot No.:** Form: Liquid

-20°C (as supplied) Storage:

Stability: ≥3 years

Storage Buffer: PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide

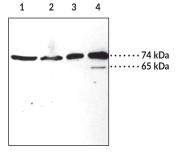
Host:

Western blot (WB); the recommended starting dilution is 1:200. Other applications Application:

were not tested, therefore optimal working concentration/dilution should be

determined empirically.

Image



Lane 1: Mouse heart (10,000 x g supernatant) (40 µg) Lane 2: Mouse liver (10,000 x g supernatant) (50 μg) Lane 3: PCSK9 Western Ready Control (2 µl) Lane 4: PCSK9 Western Ready Control (5 µl)

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

PCSK9 is a member of the subtilisin serine protease family with an important role in low-density lipoprotein (LDL) metabolism.¹ Mutation in the PCSK9 gene is associated with autosomal dominant hypercholesterolemia which is characterized by an increase in LDL cholesterol levels.² PCSK9 overexpression in wild-type mice doubles the plasma total cholesterol, possibly through acceleration of the degradation of the LDL receptor.^{1,3} PCSK9 mRNA is detected in various tissues such as liver, kidney, lung, spleen, jejunum, ileum, colon, and muscles with the highest expression in the liver.⁴ Human PCSK9 precursor is 692 amino acids in length with an estimated molecular weight of 74 kDa. This proprotein is self-cleaved to form a mature protein of 63 kDa in the Golgi.⁵

References

- 1. Maxwell, K.N., Fisher, E.A., and Breslow, J.L. Overexpression of PCSK9 accelerates the degradation of the LDLR in a post-endoplasmic reticulum compartment. *Proc. Natl. Acad. Sci. USA* **102(6)**, 2069-2074 (2005).
- 2. Abifadel, M., Varret, M., Rabès, J.-P., et al. Mutations in PCSK9 cause autosomal dominant hypercholesterolemia. *Nature Genet.* **34(2)**, 154-156 (2003).
- 3. Maxwell, K.N. and Breslow, J.L. Adenoviral-mediated expression of PCSK9 in mice results in a low-density lipoprotein receptor knockout phenotype. *Proc. Natl. Acad. Sci. USA* **101(18)**, 7100-7105 (2004).
- Seidah, N.G., Benjannet, S., Wickham, L., et al. The secretory proprotein convertase neural apoptosisregulated convertase 1 (NARC-1): Liver regeneration and neuronal differentiation. Proc. Natl. Acad. Sci. USA 100(3), 928-933 (2003).
- 5. Maxwell, K.N. and Breslow, J.L. Proprotein convertase subtilisin kexin 9: The third locus implicated in autosomal dominant hypercholesterolemia. *Curr. Opin. Lipidol.* **16**, 167-172 (2005).

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