PRODUCT INFORMATION

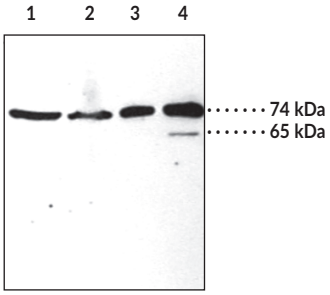
PCSK9 (human) Polyclonal Antibody

Item No. 10240

Overview and Properties

Contents:	This vial contains 500 µg of protein A-purified polyclonal antibody.
Synonyms:	NARC-1, Proprotein Convertase Subtilisin Kexin 9
Immunogen:	Purified recombinant human PCSK9
Species Reactivity:	(+) Human, mouse, and rat
Uniprot No.:	Q8NBP7
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Application:	Western blot (WB); the recommended starting dilution is 1:200. Other applications 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)

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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).
4. Seidah, N.G., Benjannet, S., Wickham, L., *et al.* The secretory proprotein convertase neural apoptosis-regulated 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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