

APE189Mu01 100µg
Active Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9)
Organism Species: *Mus musculus (Mouse)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Ser156~Gln694

Tags: N-terminal His and GST Tag

Purity: >90%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 7.5

Predicted Molecular Mass: 87.3kDa

Accurate Molecular Mass: 87kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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TEEDRSPDGS SQVEVYLLDT SIQGAHREIE GRVTITDFNS VPEEDGTRFH RQASKCDSHG
THLAGVVSGR DAGVAKGTSL HSLRVLNCQG KGTVSGTLIG LEFIRKSQLI QPSGPLVLL
PLAGGYSRIL NAACRHLART GVVLVAAAAGN FRDDACLYSP ASAPEVITVG ATNAQDQPVT
LGTGLTNFGR CVDLFAPGKD IIGASSDCST CFMSQSGTSQ AAAHVAGIVA RMLSREPTLT
LAELRQLRIH FSTKDVINMA WFPEDQQVLT PNLVATLPPS THETGGQLLC RTVWSAHS GP
TRTATATARC APEEELSCS SFSRSGRRRG DWIEAIGGQQ VCKALNAFGG EGVYAVARCC
LVPRANCSIH NTPAARAGLE THVHCHQKDH VLTGCSFHWE VEDLSVRRQP ALRSRRQPGQ
CVGHQAASVY ASCCHAPGLE CKIKEHGISG PSEQVTVACE AGWTLTGCNV LPGASLTLGA
YSVDNLCVAR VHDTARADRT SGEATVAAAI CCRSRPSAKA SWVQ
SIPWN LERIIPAWHQ

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[ACTIVITY]

Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9) is one of nine mammalian serine proteases. It is secreted mostly by hepatocytes and to a lesser extent by the intestine, pancreas, kidney, adipose tissue, and vascular cells. PCSK9 can promote the degradation of LDL receptors in the liver, which in turn reduces the liver's ability to clear LDL-C from the bloodstream. Besides, Epidermal Growth Factor (EGF) has been identified as an interactor of PCSK9, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse PCSK9 and recombinant human EGF. Briefly, PCSK9 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to EGF-coated microtiter wells and incubated for 1h at 37 °C. Wells were washed with PBST and incubated for 1h with anti-PCSK9 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 °C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 μ L stop solution to the wells and read at 450/630nm immediately. The

binding activity of recombinant mouse PCSK9 and recombinant human EGF was shown in Figure 1, the EC₅₀ for this effect is 0.111ug/mL.

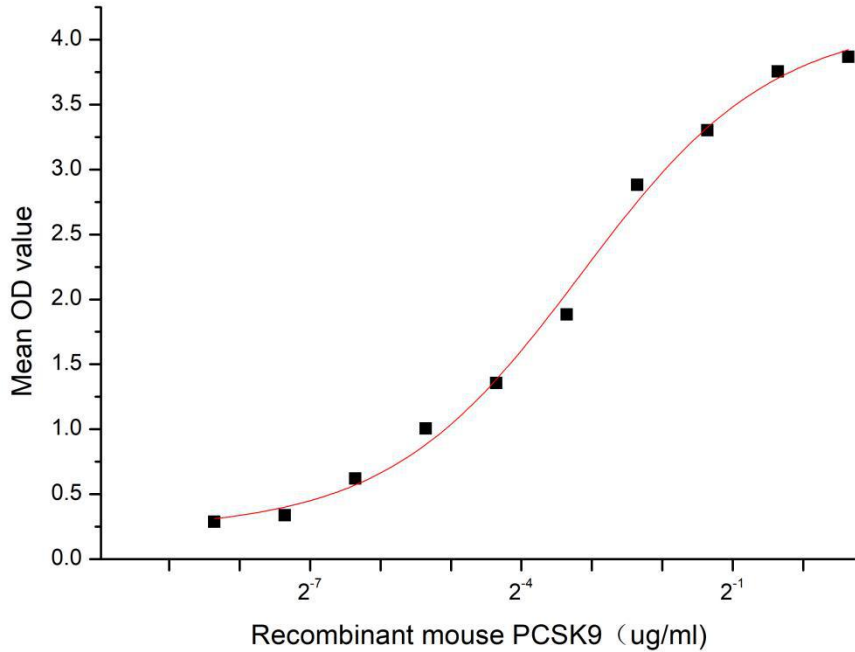


Figure 1. The binding activity of recombinant mouse PCSK9 and recombinant human EGF

[IDENTIFICATION]

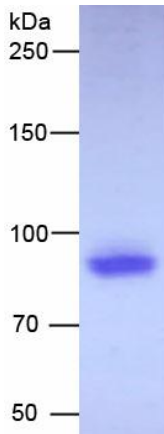


Figure 2. SDS-PAGE

Sample: Active recombinant PCSK9, Mouse

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.