

Rat PCSK9 Antibody Pair Set

Catalog No.	E-KAB-0109	Applications	ELISA
Synonyms	FH3, HCHOLA3, LDLCQ1, NARC-1, NARC1, PC9		

Kit components & Storage

Title	Specifications	Storage
Rat PCSK9 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Rat PCSK9 Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

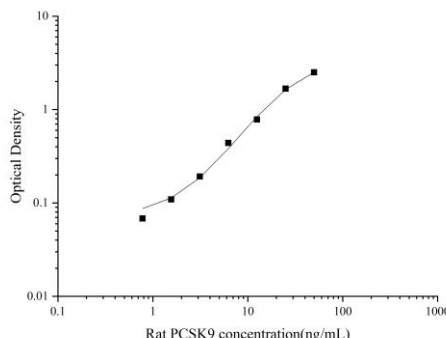
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0109)	
		Rat PCSK9 Capture Antibody	Rat PCSK9 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat PCSK9 protein	Recombinant Rat PCSK9 protein
	Swissprot	P59996	
Product details	Reactivity	Rat	Rat
	Host	Mouse	Rabbit
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A	Protein A
	Specificity	Detects Rat PCSK9 in ELISAs.	

Applications

Rat PCSK9 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																		
ELISA Capture	0.5-4µg/mL	Rat PCSK9 Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Rat PCSK9 concentration (ng/mL). The x-axis ranges from 0.1 to 1000 ng/mL, and the y-axis ranges from 0.01 to 10. The data points form a straight line with a positive slope, indicating a linear relationship on the log-log scale.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Rat PCSK9 concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr><td>0.5</td><td>0.05</td></tr> <tr><td>1</td><td>0.1</td></tr> <tr><td>2</td><td>0.2</td></tr> <tr><td>5</td><td>0.5</td></tr> <tr><td>10</td><td>1.0</td></tr> <tr><td>20</td><td>2.0</td></tr> <tr><td>50</td><td>5.0</td></tr> <tr><td>100</td><td>10.0</td></tr> </tbody> </table>	Rat PCSK9 concentration (ng/mL)	Optical Density	0.5	0.05	1	0.1	2	0.2	5	0.5	10	1.0	20	2.0	50	5.0	100	10.0
Rat PCSK9 concentration (ng/mL)	Optical Density																				
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100	10.0																				
ELISA Detection	1:1000-1:10000	Rat PCSK9 Detection Antibody (Biotin)																			

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

Crucial player in the regulation of plasma cholesterol homeostasis. Binds to low-density lipoprotein receptor family members: low density lipoprotein receptor (LDLR), very low density lipoprotein receptor (VLDLR), apolipoprotein E receptor (LRP1/APOER) and apolipoprotein receptor 2 (LRP8/APOER2), and promotes their degradation in intracellular acidic compartments. Acts via a non-proteolytic mechanism to enhance the degradation of the hepatic LDLR through a clathrin LDLRAP1/ARH-mediated pathway. May prevent the recycling of LDLR from endosomes to the cell surface or direct it to lysosomes for degradation. Can induce ubiquitination of LDLR leading to its subsequent degradation. Inhibits intracellular degradation of APOB via the autophagosome/lysosome pathway in a LDLR-independent manner. Involved in the disposal of non-acetylated intermediates of BACE1 in the early secretory pathway. Inhibits epithelial Na⁺ channel (ENaC)-mediated Na⁺ absorption by reducing ENaC surface expression primarily by increasing its proteasomal degradation. Regulates neuronal apoptosis via modulation of LRP8/APOER2 levels and related anti-apoptotic signaling pathways.