

Mouse NGAL Antibody Pair Set

Catalog No.	E-KAB-0090	Applications	ELISA
Synonyms	LCN2, Lipocalin 2, Oncogene 24p3, MSFI		

Kit components & Storage

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

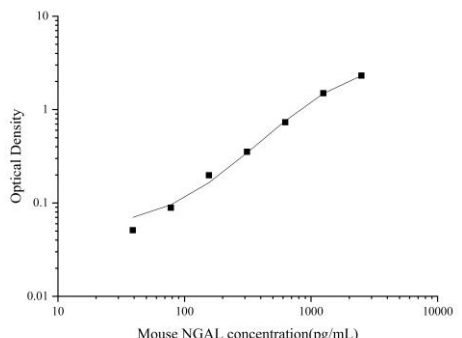
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0090)	
		Mouse NGAL Capture Antibody	Mouse NGAL Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse NGAL protein	Recombinant Mouse NGAL protein
	Swissprot	P11672	
Product details	Reactivity	Mouse	Mouse
	Host	Goat	Goat
	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	Antigen Affinity	Antigen Affinity
	Specificity	Detects Mouse NGAL in ELISAs.	

Applications

Mouse NGAL Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images										
ELISA Capture	0.5-4µg/mL	Mouse NGAL Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Mouse NGAL concentration (pg/mL). The x-axis ranges from 10 to 10,000 pg/mL, and the y-axis ranges from 0.01 to 10. The data points show a clear upward trend, indicating that as the concentration of Mouse NGAL increases, the optical density also increases. The curve is smooth and passes through several data points.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Mouse NGAL concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>0.05</td> </tr> <tr> <td>100</td> <td>0.1</td> </tr> <tr> <td>1000</td> <td>0.5</td> </tr> <tr> <td>10000</td> <td>2.0</td> </tr> </tbody> </table>	Mouse NGAL concentration (pg/mL)	Optical Density	10	0.05	100	0.1	1000	0.5	10000	2.0
Mouse NGAL concentration (pg/mL)	Optical Density												
10	0.05												
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1000	0.5												
10000	2.0												
ELISA Detection	1:1000-1:10000	Mouse NGAL Detection Antibody (Biotin)											

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

Background

Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development. Binds iron through association with 2,3-dihydroxybenzoic acid (2,3-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron from the cell, depending on the context. Iron-bound form (holo-24p3) is internalized following binding to the SLC22A17 (24p3R) receptor, leading to release of iron and subsequent increase of intracellular iron concentration. In contrast, association of the iron-free form (apo-24p3) with the SLC22A17 (24p3R) receptor is followed by association with an intracellular siderophore, iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration. Involved in apoptosis due to interleukin-3 (IL3) deprivation: iron-loaded form increases intracellular iron concentration without promoting apoptosis, while iron-free form decreases intracellular iron levels, inducing expression of the proapoptotic protein BCL2L1/BIM, resulting in apoptosis. Involved in innate immunity, limits bacterial proliferation by sequestering iron bound to microbial siderophores, such as enterobactin. Can also bind siderophores from *M. tuberculosis*.