Human NGAL Antibody Pair Set

Catalog No. E-KAB-0058 **Applications** ELISA
Synonyms LCN2, Lipocalin 2, Oncogene 24p3, MSFI

Kit components & Storage

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

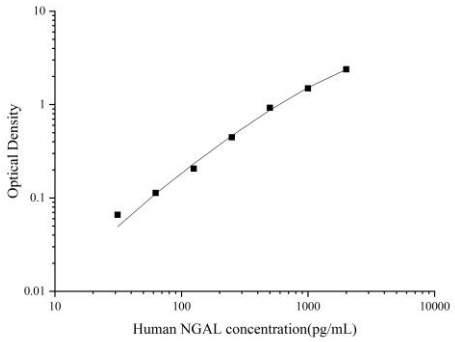
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0058)	
		Human NGAL Capture Antibody	Human NGAL Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human NGAL protein	Recombinant Human NGAL protein
	Swissprot	P80188	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	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 Human NGAL in ELISAs.	

Applications

Human NGAL Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4μg/mL	Human NGAL Capture Antibody	
ELISA Detection	1:1000-1:10000	Human 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 BCL2L11/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.