ARG83832
Human NGAL / Lipocalin 2 ELISA Kit

Package: 96 wells
Store at: 4°C, -20°C

Summary

Product Description	ARG83832 Human NGAL / Lipocalin 2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human NGAL / Lipocalin 2 in serum, plasma, cell culture supernatants and urine.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	NGAL / Lipocalin 2
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	39.0625 pg/mL
Sample Type	serum, plasma, cell culture supernatants and urine.
Standard Range	78.125 - 5000 pg/mL
Sample Volume	10 µL
Alternate Names	Siderocalin LCN2; Oncogene 24p3; MSFI; 25 kDa alpha-2-microglobulin-related subunit of MMP-9; Lipocalin-2; p25; Neutrophil gelatinase-associated lipocalin; 24p3; NGAL

Application Instructions

Assay Time	4 hours

Properties

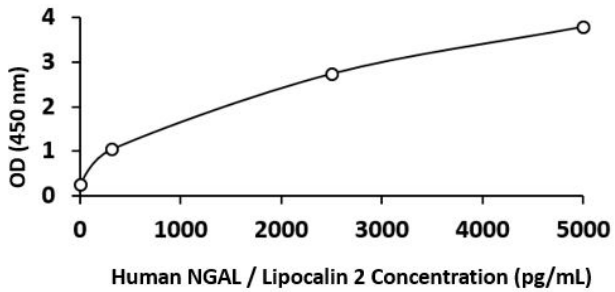
Form	96 well
Storage instruction	Store the kit at 4°C, -20°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	LCN2
Gene Full Name	lipocalin 2
Background	This gene encodes a protein that belongs to the lipocalin family. Members of this family transport small hydrophobic molecules such as lipids, steroid hormones and retinoids. The protein encoded by this gene is a neutrophil gelatinase-associated lipocalin and plays a role in innate immunity by limiting bacterial growth as a result of sequestering iron-containing siderophores. The presence of this protein in blood and urine is an early biomarker of acute kidney injury. This protein is thought to be be involved in multiple cellular processes, including maintenance of skin homeostasis, and suppression of invasiveness and metastasis. Mice lacking this gene are more susceptible to bacterial infection than wild type mice. [provided by RefSeq, Sep 2015]

Function	Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development. Binds iron through association with 2,5-dihydroxybenzoic acid (2,5-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, possibly by sequestrating iron, leading to limit bacterial growth. [UniProt]
Highlight	Related products: NGAL antibodies; NGAL ELISA Kits; New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Images



ARG83832 Human NGAL / Lipocalin 2 ELISA Kit standard curve image

ARG83832 Human NGAL / Lipocalin 2 ELISA Kit results of a typical standard run with optical density reading at 450 nm.