

Lipocalin-2/NGAL Polyclonal Antibody(Capture/Detector)

catalog number: **AN000090P**

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

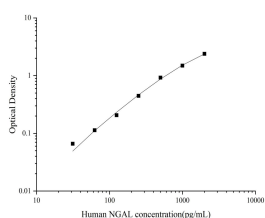
Description

Reactivity	Human
Immunogen	Recombinant Human Lipocalin-2/NGAL protein expressed by E.coli
Host	Rabbit
Isotype	Rabbit IgG
Purification	Antigen Affinity Purification
Buffer	Phosphate buffered solution, pH 7.2, containing 0.05% Proclin300.

Applications Recommended Dilution

ELISA Capture	2-8 µg/mL
ELISA Detector	0.1-0.4 µg/mL

Data



Sandwich ELISA-Recombinant Human Lipocalin-2/NGAL protein standard curve. Background subtracted standard curve using Lipocalin-2/NGAL antibody(AN000090P) (Capture), Lipocalin-2/NGAL antibody(AN000090P) (Detector) in sandwich ELISA. The reference range value for Recombinant Human Lipocalin-2/NGAL protein is 31.25-20000 pg/mL.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

For Research Use Only

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*.