

Product datasheet

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ARG81764 Mouse Lipocalin 2 ELISA Kit

Package: 96 wells Store at: 4°C

Component

| Cat. No. | Component Name | Package | Temp |
|--------------|---------------------------------------|----------------------|---|
| ARG81764-001 | Antibody-coated microplate | 8 X 12 strips | 4°C. Unused strips should be sealed tightly in the air-tight pouch. |
| ARG81764-002 | Standard | 2 X 10 ng/vial | 4°C |
| ARG81764-003 | Standard/Sample diluent | 30 ml (Ready to use) | 4°C |
| ARG81764-004 | Antibody conjugate concentrate (100X) | 1 vial (100 μl) | 4°C |
| ARG81764-005 | Antibody diluent buffer | 12 ml (Ready to use) | 4°C |
| ARG81764-006 | HRP-Streptavidin concentrate (100X) | 1 vial (100 μl) | 4°C |
| ARG81764-007 | HRP-Streptavidin diluent buffer | 12 ml (Ready to use) | 4°C |
| ARG81764-008 | 25X Wash buffer | 20 ml | 4°C |
| ARG81764-009 | TMB substrate | 10 ml (Ready to use) | 4°C (Protect from light) |
| ARG81764-010 | STOP solution | 10 ml (Ready to use) | 4°C |
| ARG81764-011 | Plate sealer | 4 strips | Room temperature |
| | | | |

Summary

| Product Description | ARG81764 Mouse Lipocalin 2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse Lipocalin 2 in serum, plasma (heparin), urine and cell culture supernatants. | | |
|---------------------|--|--|--|
| Tested Reactivity | Ms | | |
| Tested Application | ELISA | | |

Specificity There is no detectable cross-reactivity with other relevant proteins.

Target Name Lipocalin 2
Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 39 pg/ml

Sample Type Serum, plasma (heparin), urine and cell culture supernatants.

Standard Range 78 - 5000 pg/ml

Sample Volume $100 \ \mu l$

Precision Intra-Assay CV: 4.6%; Inter-Assay CV: 6.2%

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

~ 5 hours

Properties

Form

96 well

Storage instruction

Store the kit at 2-8°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

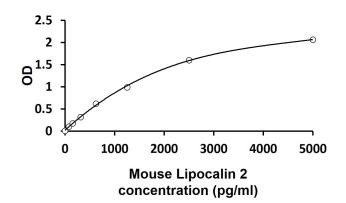
Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development. Binds iron through association with 2,5-dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron from 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:

<u>Lipocalin 2 antibodies;</u> <u>Lipocalin 2 ELISA Kits;</u>

New ELISA data calculation tool: Simplify the ELISA analysis by GainData



ARG81764 Mouse Lipocalin 2 ELISA Kit standard curve image

ARG81764 Mouse Lipocalin 2 ELISA Kit results of a typical standard run with optical density reading at $450\ nm$.