

## Human Lipocalin-2/NGAL ELISA Kit | LCN2 elisa kit

Human Lipocalin-2/NGAL Quick ELISA Kit

CATALOG #  
**AAA125877**

REACTIVITY  
**Human**

### PRODUCT SYNONYMS

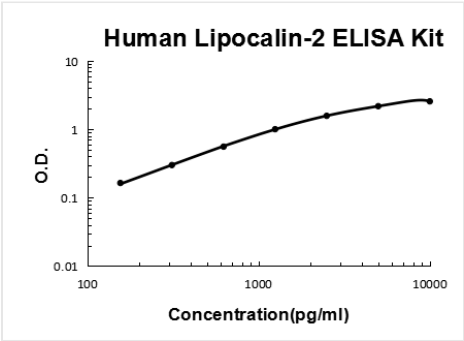
Lipocalin-2/NGAL; Human Lipocalin-2/NGAL Quick ELISA Kit; LCN2; HNL; NGAL; Neutrophil gelatinase-associated lipocalin; 25 kDa alpha-2-microglobulin-related subunit of MMP-9; Lipocalin-2; Oncogene 24p3; Siderocalin; p25; lipocalin 2; LCN2 elisa kit

### PRODUCT SPECIFICATIONS

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                   | Human                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Specificity                  | Natural and recombinant Human LCN2                                                                                                                                                                                                                                                                                                                                                                                             |
| Assay Type                   | Colorimetric sandwich                                                                                                                                                                                                                                                                                                                                                                                                          |
| Samples                      | cell culture supernatants, serum, plasma (heparin), saliva and urine                                                                                                                                                                                                                                                                                                                                                           |
| Detection Range              | 156pg/ml-10,000pg/ml                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sensitivity                  | <10pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Capture/Detection Antibodies | Capture antibody- polyclonal antibody from goat Detection antibody- polyclonal antibody from goat                                                                                                                                                                                                                                                                                                                              |
| Sample Data                  | Concentration(pg/ml) 0 156 312 625 1250 2500 5000 10000<br>O.D. 0.030 0.194 0.330 0.588 1.035 1.606 2.212 2.599                                                                                                                                                                                                                                                                                                                |
| Intra-Assay Precision        | Sample 1 2 3 <br>n 16 16 16 <br>Mean(pg/ml) 285 1624 5541 <br>Standard deviation 18.52 86.07 243.8 <br>CV(%) 6.5% 5.3% 4.4%                                                                                                                                                                                                                                                                                                    |
| Inter-Assay Precision        | Sample 1 2 3 <br>n 24 24 24 <br>Mean(pg/ml) 290 1737 5384 <br>Standard deviation 22.04 99 285.35 <br>CV(%) 7.6% 5.7% 5.3%                                                                                                                                                                                                                                                                                                      |
| Reproducibility              | To assay reproducibility, three samples with differing target protein concentrations were assayed using four different lots.<br>Lots: Lot 1 (pg/ml) Lot 2 (pg/ml) Lot 3 (pg/ml) Lot 4 (pg/ml) Mean (pg/ml) Standard Deviation CV (%)<br>Sample 1: 285 255 236 267 253 15.43 6.1%<br>Sample 2: 1624 1649 1587 1810 1667 120.02 7.2%<br>Sample 3: 5541 5497 5323 4757 5279 306.18 5.8%<br>*number of samples for each test n=16. |
| Cross Reactivity             | There is no detectable cross-reactivity with other relevant proteins.                                                                                                                                                                                                                                                                                                                                                          |
| Immunogen                    | Expression system for standard: NS0; Immunogen sequence: Q21-G198                                                                                                                                                                                                                                                                                                                                                              |
| Anticoagulant                | heparin                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Benefits                     | The Quick ELISA kits, assay takes less than 1.5 hours. Detect Human LCN2 with <10pg/ml sensitivity. Format: 96-well plate with removable strips.<br>This is a TMB colorimetric sandwich ELISA kit with short assay time and quick experiment set up.                                                                                                                                                                           |

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|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Principle               | <p>Human LCN2 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human LCN2 in cell culture supernatants, serum, plasma (heparin), saliva and urine. It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human LCN2 with immunogen: Expression system for standard: NS0; Immunogen sequence: Q21-G198.</p> <p>To measure Human LCN2, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human LCN2 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human LCN2 in the sample.</p> |
| Assay Procedure Step 1  | 10000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312.5pg/ml, 156.25pg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| TMB Incubation Time     | 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Preparation and Storage | Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles. (Shipped with wet ice.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

### IMAGES



Application Data

### ADDITIONAL INFORMATION

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|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for LCN2 elisa kit | <p>Lipocalin-2(LCN2), also known as NGAL, is a protein associated with neutrophil gelatinase. 1 The LCN2 gene is located at 9q34 and contains 7 exons. 2 The 25-kD LCN2 protein is believed to bind small lipophilic substances such as bacteria-derived lipopolysaccharide(LPS) and formylpeptides and may function as a modulator of inflammation. NGAL tightly binds bacterial catecholate-type ferric siderophores through a cyclically permuted, hybrid electrostatic/cation-pi interaction and is a potent bacteriostatic agent in iron-limiting conditions. 3 The primary LCN2 transcript is 3,696 nucleotides long, and the processed transcript is 809 nucleotides long. 4 LCN2 expression in adult bone marrow, uterus, prostate, salivary gland, stomach, appendix, colon, trachea, and lung, and in fetal spleen and lung. The standard product used in this kit is recombinant human NGAL, consisting of 178 amino acids with the molecular mass of 22KDa.</p> |
| Product Categories/Family for LCN2 elisa kit   | ELISA kits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

### NCBI AND UNIPROT INFORMATION

|                         |                                                                        |
|-------------------------|------------------------------------------------------------------------|
| NCBI GI #               | 49457137                                                               |
| UniProt Accession #     | P80188; P30150; Q5SYV9; Q5SYW0; Q6FGL5; Q92683; A6NII8; B4DWV4; B7ZAA2 |
| Molecular Weight        | 22,588 Da                                                              |
| NCBI Official Full Name | LCN2                                                                   |

|                            |                                            |
|----------------------------|--------------------------------------------|
| UniProt Protein Name       | Neutrophil gelatinase-associated lipocalin |
| UniProt Gene Name          | LCN2                                       |
| UniProt Synonym Gene Names | HNL; NGAL; NGAL                            |
| UniProt Entry Name         | NGAL_HUMAN                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/lcn2-human-elisa-kits/lipocalin-2-ngal/125877>