# ARG83830
# arigoPLEX® Human Kidney Injury Multiplex ELISA Kit (KIM1, IL18, NGAL, Cystatin C)

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

## Summary

| | |
|---|---|
| Product Description | ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit (KIM1, IL18, NGAL, Cystatin C) is an Enzyme Immunoassay kit for the quantification of Human Kidney Injury in serum, plasma and cell culture supernatants.<br><br>See all Multiplex ELISA kits |
| Tested Reactivity | Hu |
| Tested Application | ELISA |
| Target Name | Kidney Injury |
| Conjugation | HRP |
| Conjugation Note | Substrate: TMB and read at 450 nm. |
| Sensitivity | KIM1:31.25 pg/mL<br>IL18:31.25 pg/mL<br>NGAL:78.125 pg/mL<br>Cystatin C:62.5 pg/mL |
| Sample Type | serum, plasma and cell culture supernatants. |
| Standard Range | KIM1:62.5-2000 pg/mL<br>IL18:62.5-2000 pg/mL<br>NGAL:156.25-5000 pg/mL<br>Cystatin C:125-4000 pg/mL |
| Sample Volume | 50 µl |

## Application Instructions

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|---|---|
| Assay Time | 4 hours |

## Properties

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|---|---|
| Form | 96 well |
| Storage instruction | Store components at 4°C or -20°C. 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

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|---|---|
| Gene Symbol | KIM1; IL18; NGAL; Cystatin C |
| Gene Full Name | TIM1 / KIM1 / HAVCR1 / hepatitis A virus cellular receptor 1 ;<br>IL18 / interleukin 18;<br>NGAL / Lipocalin-2 / Neutrophil Gelatinase-Associated Lipocalin / LCN2; |

CST3 / Cystatin C

**Background**

KIM1:The protein encoded by this gene is a membrane receptor for both human hepatitis A virus (HHAV) and TIMD4. The encoded protein may be involved in the moderation of asthma and allergic diseases. The reference genome represents an allele that retains a MTTVP amino acid segment that confers protection against atopy in HHAV seropositive individuals. Alternative splicing of this gene results in multiple transcript variants. Related pseudogenes have been identified on chromosomes 4, 12 and 19. [provided by RefSeq, Apr 2015]

IL18:The protein encoded by this gene is a proinflammatory cytokine that augments natural killer cell activity in spleen cells, and stimulates interferon gamma production in T-helper type I cells. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Aug 2011]

NGAL:Siderocalin LCN2; Oncogene 24p3; MSFI; 25 kDa alpha-2-microglobulin-related subunit of MMP-9; Lipocalin-2; p25; Neutrophil gelatinase-associated lipocalin; 24p3; NGAL

Cystatin C:The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and the kininogens. The type 2 cystatin proteins are a class of cysteine proteinase inhibitors found in a variety of human fluids and secretions, where they appear to provide protective functions. The cystatin locus on chromosome 20 contains the majority of the type 2 cystatin genes and pseudogenes. This gene is located in the cystatin locus and encodes the most abundant extracellular inhibitor of cysteine proteases, which is found in high concentrations in biological fluids and is expressed in virtually all organs of the body. A mutation in this gene has been associated with amyloid angiopathy. Expression of this protein in vascular wall smooth muscle cells is severely reduced in both atherosclerotic and aneurysmal aortic lesions, establishing its role in vascular disease. In addition, this protein has been shown to have an antimicrobial function, inhibiting the replication of herpes simplex virus. Alternative splicing results in multiple transcript variants encoding a single protein. [provided by RefSeq, Nov 2014]

**Function**

KIM1:May play a role in T-helper cell development and the regulation of asthma and allergic diseases. Receptor for TIMD4 (By similarity). In case of human hepatitis A virus (HHAV) infection, functions as a cell-surface receptor for the virus. May play a role in kidney injury and repair. [UniProt]

IL18:Augments natural killer cell activity in spleen cells and stimulates interferon gamma production in T-helper type I cells. [UniProt]

NGAL:Lipocalin 2 is from a family of proteins that are involved in the transportation of small hydrophobic molecules including steroids, retinoids, bilin and retinods. Lipocalins have been linked to many biolchemical processes such as immune response, pheromone transport, biological prostaglandin synthesis, retinoid binding, and cancer cell interactions.

Cystatin C:As an inhibitor of cysteine proteinases, this protein is thought to serve an important physiological role as a local regulator of this enzyme activity. [UniProt]

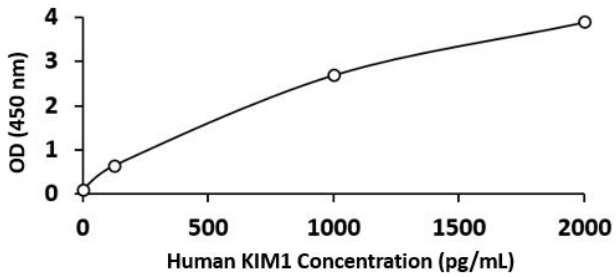
**Highlight**

Related Product:
anti-TIM1 / KIM1 antibody;
anti-IL18 antibody;
anti-NGAL / Lipocalin-2 antibody;
anti-CST3 / Cystatin C antibody;

## Images

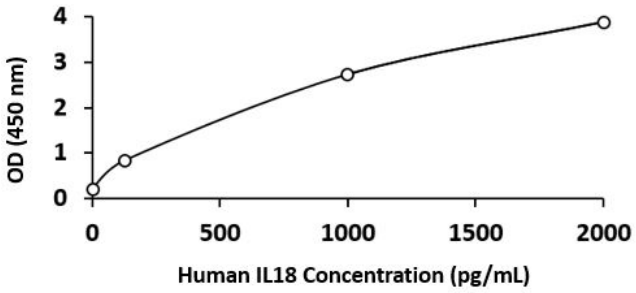
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 |
| B | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 |
| C | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL |
| D | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C |
| E | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 | KIM1 |
| F | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 | IL18 |
| G | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL | NGAL |
| H | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C | Cystatin C |

Antibodies Coating Pattern In Microtiter Plate of ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit



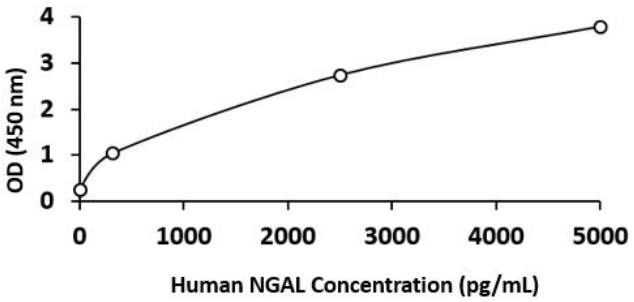

ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit standard curve image

ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit results of a typical standard for Human KIM1 run with optical density reading at 450 nm.



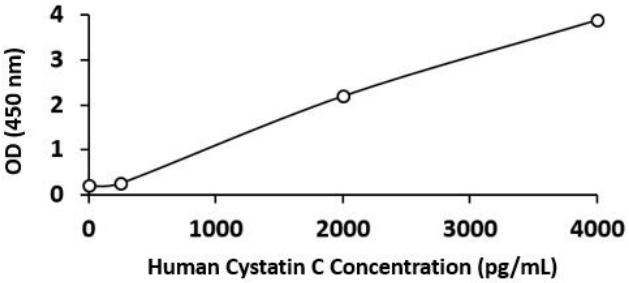

ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit standard curve image

ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit results of a typical standard for Human IL18 run with optical density reading at 450 nm.




ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit standard curve image

ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit results of a typical standard for Human NGAL run with optical density reading at 450 nm.




ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit standard curve image

ARG83830 arigoPLEX® Human Kidney Injury Multiplex ELISA Kit results of a typical standard for Human Cystatin C run with optical density reading at 450 nm.