

CX3CL1

Human Chemokine (C-X3-C motif) Ligand 1 ELISA Kit

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| Catalog No. | CKH139 | Quantity: | 1 x 96 tests |
| Description: | <p>Chemokine (C-X3-C motif) Ligand 1 (CX3CL1) is a large cytokine protein of 373 amino acids, it contains multiple domains and is the only known member of the CX3C chemokine family. It is also commonly known under the names Fractalkine (in humans) and Neurotactin (in mice). The polypeptide structure of CX3CL1 differs from the typical structure of other chemokines (three amino acids separating the initial pair of Cysteines compared to none in CC chemokines and only one intervening amino acid in CXC chemokines). CX3CL1 is produced as a long protein with an extended Mucin-like stalk and a chemokine domain on top. The Mucin-like stalk permits it to bind to the surface of certain cells. However a soluble (90 kDa) version of this chemokine has also been observed. Soluble CX3CL1 potently chemoattracts T-cells and monocytes, while the cell-bound chemokine promotes strong adhesion of leukocytes to activated endothelial cells, where it is primarily expressed. CX3CL1 elicits its adhesive and migratory functions by interacting with the chemokine receptor CX3CR1.</p> <p>The Human CX3CL1 ELISA is an <i>in vitro</i> enzyme-linked immunosorbent assay for the quantitative measurement of Human CX3CL1 in serum, plasma, cell culture supernatants and urine. This assay employs an antibody specific for CX3CL1 coated on a 96-well plate. Standards and samples are added into the wells and CX3CL1 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and Biotinylated Anti-Human CX3CL1 antibody is added. After washing away unbound Biotinylated antibody, HRP-Streptavidin is added to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of CX3CL1 bound.</p> | | |
| Sensitivity: | The minimum detectable dose of CX3CL1 is typically less than 300 pg/mL. | | |
| Reproducibility: | Intra-Assay: CV<10%; Inter-Assay: CV<12% | | |
| Samples: | Serum, plasma, cell culture supernatants and urine. | | |
| Recovery: | Serum mean recovery of 93% (range 82-102%) Plasma mean recovery of 94% (range 83-103%) Cell culture media mean recovery of 95% (range 83-102%) | | |
| Reagents Included: | <ol style="list-style-type: none"> 1. Microplate 96-wells coated with Capture Antibody 2. Wash Buffer Concentrate (20x) 3. Standards 4. Assay Diluent A: Standard/Sample-Serum/Plasma 5. Assay Diluent B: Standard/Sample-Cell Culture Medium/Urine 6. Biotinylated Detection Antibody 7. HRP-Streptavidin Concentrate 8. TMB One-Step Substrate Reagent 9. Stop Solution | | |
| Storage & Stability: | May be stored for up to 6 months at 2-8°C from the date of shipment. Standard should be stored below -20°C (-80°C recommended) after reconstitution. Opened Microplate Wells and reagents may be store for up to 1 month at 2-8°C. Return unused wells to the pouch containing desiccant pack, reseal along entire edge of zip seal. | | |

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