Datasheet for ABIN2648785

CXCL2 ELISA Kit

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Overview

Quantity:	96 tests
Target:	CXCL2
Reactivity:	Mouse
Application:	ELISA

Product Details

Sample Type:	Serum, Plasma, Cell Culture Cells
Detection Method:	Colorimetric
Sensitivity:	4 pg/ml
Characteristics:	Mouse macrophage inflammatory protein-2 (MIP-2), also known as CXCL2, was originally identified as a heparin-binding protein secreted by an LPS-stimulated mouse macrophage cell line (1). A cDNA clone encoding the protein was isolated from this cell line and characterized (2). Based on its protein and DNA sequences, mouse MIP-2 was classified as a member of the alpha (CXC) chemokine family of inflammatory and immunoregulatory cytokines (3). Mouse MIP-2 cDNA encodes a 100 amino acid residue precursor protein from which the amino-terminal 27 amino acid residues are cleaved to generate the mature mouse MIP-2. The protein sequence of mouse MIP-2 shows approximately 63 % identity to that of mouse KC, another mouse alpha chemokine. Mouse MIP-2 is also 60 % identical to human GROβ and GROγ(2). Based on these protein sequence similarities, it is likely that mouse KC and MIP-2 are homologs of human GROα, β and γ chemokines. Since chemokines with protein sequence homology to human IL-8 have not been identified in mice, it has been suggested that the mouse KC and MIP-2 are functional homologs of human IL-8 in mice (3, 4). A putative mouse homolog of the human IL-8 receptor beta (IL-8 Rβ) has also been cloned. This receptor shows 71 % identity to

Product Details

	human IL-8 Rβ and 68 % identity to human IL-8 Rα. Both mouse KC and MIP-2 bind mouse IL-8 Rβ with high affinity (5). Like human IL-8, mouse MIP-2 exhibits potent neutrophil chemotactic activity and may be a key mediator of neutrophil recruitment in response to tissue injury and infection (3, 4). Increased MIP-2 expression has been found to be associated with neutrophil influx in various inflammatory conditions (6 - 10).

Target Details

Target:	CXCL2
Alternative Name:	MIP-2 (CXCL2 Products)
Pathways:	Cellular Response to Molecule of Bacterial Origin

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Sample Volume:	100 µL
Assay Time:	3 h
Plate:	Pre-coated
Protocol:	Mouse Macrophage Inflammatory Protein 2 (MIP-2) ELISA Assay Kit employs quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for MIP-2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any MIP-2 present is bound by the immobilized antibody. Following incubation unbound samples are removed during a wash step, and then a detection antibody specific for MIP-2 is added to the wells and binds to the combination of capture antibody-MIP-2 in sample. Following a wash to remove any unbound combination, and enzyme conjugate is added to the wells. Following incubation and wash steps a substrate is added. A colored product is formed in proportion to the amount of MIP-2 present in the sample. The reaction is terminated by addition of acid and absorbance is measured at 450nm. A standard curve is prepared from seven MIP-2 standard dilutions and MIP-2 sample concentration determined.
Restrictions:	For Research Use only

Handling

Storage:	4 °C