

Human IL-8/Interleukin-8/CXCL8 ELISA Kit | IL-8 elisa kit

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CATALOG #
AAA258324

REACTIVITY
Human

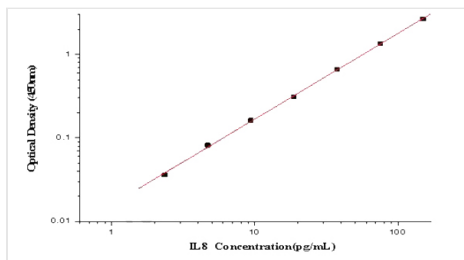
PRODUCT SYNONYMS

IL-8/Interleukin-8/CXCL8; Human IL-8/Interleukin-8/CXCL8 ELISA Kit; IL-8/CXCL8 ELISA Kit; Human; chemokine (C-X-C motif) ligand 8; GCP-1 ELISA Kit; GCP1 ELISA Kit; IL-8 ELISA Kit; IL8 ELISA Kit; Interleukin-8 ELISA Kit; LECT ELISA Kit; LUCT ELISA Kit; LYNAP ELISA Kit; MDNCF ELISA Kit; MONAP ELISA Kit; NAF ELISA Kit; NAP-1 ELISA Kit; NAP1 ELISA Kit; IL-8 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay recognizes both recombinant and natural Human IL8. The factors listed below were prepared at 50 ng/mL in dilution buffer and assayed for cross-reactivity. No cross-reactivity was observed.
Assay Type	Quantitative Sandwich
Samples	Cell culture supernates
Sensitivity	< 0.75 pg/mL
Intra-assay Precision	Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision.
Inter-assay Precision	Three samples of known concentration were tested in five separate assays to assess inter-assay precision.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IL-8 elisa kit	Background: Interleukin 8 (IL-8), also known as CXCL8, which is a chemokine with a defining CXC amino acid motif that was initially characterized for its leukocyte chemotactic activity, is now known to possess tumorigenic and proangiogenic properties as well. This chemokine is secreted by a variety of cell types including monocyte/macrophages, T cells, neutrophils, fibroblasts, endothelial cells, and various tumor cell lines in response to inflammatory stimuli (IL1, TNF, LPS, etc). In human gliomas, IL-8 is expressed and secreted at high levels both in vitro and in vivo, and recent experiments suggest it is critical to glial tumor neovascularity and progression. Levels of IL-8 correlate with histologic grade in glial neoplasms, and the most malignant form, glioblastoma, shows the highest expression in pseudopalisading cells around necrosis, suggesting that hypoxia/anoxia may stimulate expression. Interleukin (IL)-8/CXCL8 is a potent neutrophil chemotactic factor. Accumulating evidence has demonstrated that various types of cells can produce a large amount of IL-8/CXCL8 in response to a wide variety of stimuli, including proinflammatory cytokines, microbes and their products, and environmental changes such as hypoxia, reperfusion, and hyperoxia. Numerous observations have established IL-8/CXCL8 as a key mediator in neutrophil-mediated acute inflammation due to its potent actions on neutrophils. However, several lines of evidence indicate that IL-8/CXCL8 has a wide range of actions on various types of cells, including lymphocytes, monocytes, endothelial cells, and fibroblasts, besides neutrophils. The discovery of these biological functions suggests that IL-8/CXCL8 has crucial roles in various pathological conditions such as chronic inflammation and cancer. IL-8 has been associated with tumor angiogenesis, metastasis, and poor prognosis in breast cancer. IL-8 may present a novel therapeutic target for estrogen driven breast carcinogenesis and tumor progression. Principle of the Assay: The principle of this ELISA kit is based on the solid phase sandwich enzyme immunoassay technique. A monoclonal antibody specific for Human IL-8/Interleukin-8/CXCL8 has been pre-coated onto well plate strips. Standards and samples are added to the wells and Human IL-8/Interleukin-8/CXCL8 present in the sample is bound by the immobilized antibody. After incubation the wells are washed and a horseradish peroxidase conjugated anti-Human IL-8/Interleukin-8/CXCL8 antibody is added, producing an antibody-antigen-antibody "sandwich complex". Following a wash to remove any unbound antibody a TMB substrate solution is loaded and color develops in proportion to the amount of Human IL-8/Interleukin-8/CXCL8 bound. The reaction is stopped by the addition of a stop solution and the intensity of the color can be measured at 450 nm (See schematics below). Intended Uses: For the quantitative determination of Human IL-8/Interleukin-8/CXCL8 concentration in cell culture supernates.
References	Mukaida N. (2003) Pathophysiological roles of interleukin-8/CXCL8 in pulmonary diseases. Am J Physiol Lung Cell Mol Physiol. 284(4): L566-77. Brat DJ, et al. (2005) The role of interleukin-8 and its receptors in gliomagenesis and tumoral angiogenesis. Neuro Oncol. 7(2): 122-33. Bendrik C, et al. (2009) Estradiol increases IL-8 secretion of normal human breast tissue and breast cancer in vivo. J Immunol. 182(1): 371-8.

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.