

Mouse KC ELISA Kit | KC elisa kit

KC (Murine) OmniKine ELISA Kit

CATALOG #
AAA315679

REACTIVITY
Mouse

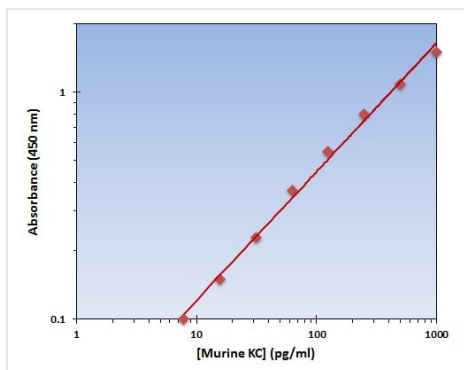
PRODUCT SYNONYMS

KC; KC (Murine) OmniKine ELISA Kit; Growth-regulated alpha protein; C-X-C motif chemokine 1; Platelet-derived growth factor-inducible protein KC; Secretory protein N51; KC elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Mouse
Specificity	The OmniKine™ Murine KC ELISA is capable of recognizing both recombinant and naturally produced Murine KC proteins. The antigens listed below were tested at 50 ng/ml the following antigens exhibited less than 1% cross reactivity Rat: GROalpha The antigens listed below were tested at 50 ng/ml the following antigens exhibited less than 1% cross reactivity Human ENA-78, GCP-2, GROalph, GRObeta, GROgamma, IL-8, NAP-2 Murine IL-13 Rat GRObeta.
Form/Format	12 x 8-Well Microstrips
Sequence Length	96
Assay Type	Quantitative Sandwich
Samples	Supernatants, Sera and Plasma
Sensitivity	16-1000 pg/ml
Detection Method	Colorimetric 450 nm
Subtype	None
Preparation and Storage	Store entire kit at 4 degree C until use.

IMAGES



Application Data

The OmniKine Murine KC ELISA Kit allows for the detection and quantification of endogenous levels of natural and/or recombinant Murine KC proteins within the range of 8-1000 pg/ml.

ADDITIONAL INFORMATION

Related Product Information for KC elisa kit	Background: Murine KC or Growth-regulated Alpha Protein, also known commonly as Chemokine (C-X-C Motif) Ligand 1, is a 96 amino acid cytokine protein encoded by the Cxcl1 gene located at 5 E-F locus on chromosome 5. After translation of the protein, the resulting peptide is proteolytically cleaved into the 24 residue signal sequence as well as the 72 residue Growth-regulated Alpha Protein. However, if the first 4 residues are cleaved from the mature Growth-regulated Alpha Protein, the resulting peptide is known commonly as KC (5-72) or Hematopoietic Synergistic Factor. The N-terminal processed form KC (5-72) is produced by proteolytic cleavage after secretion from bone marrow stromal cells. Moreover, Murine Growth-regulated Alpha Protein has chemotactic activity for neutrophils and contributes to their activation during inflammation. Moreover, it is known to be a hematoregulatory chemokine, which, in vitro, suppresses hematopoietic progenitor cell proliferation. On the other hand, its shorter derivative, KC (5-72) is commonly believed to show greater and more enhanced hematopoietic activity. The induction of KC is typically driven by Platelet-Derived Growth Factor (PDGF), but in the lungs, induction is attributed to lipopolysaccharides from bacterial cell walls or inflammation. Principle of the Assay: The OmniKine™ Murine KC ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Murine KC concentrations within any experimental sample including cell lysates, serum and plasma. This particular immunoassay utilizes the quantitative technique of a "Sandwich" Enzyme-Linked Immunosorbent Assay (ELISA) where the target protein (antigen) is bound in a "sandwich" format by the primary capture antibodies coated to each well-bottom and the secondary detection antibodies added subsequently by the investigator. The capture antibodies coated to the bottom of each well are specific for a particular epitope on Human SDF-1alpha while the user-added detection antibodies bind to epitopes on the captured target protein. Amid each step of the procedure, a series of wash steps must be performed to ensure the elimination of non-specific binding between proteins to other proteins or to the solid phase. After incubation and "sandwiching" of the target antigen, a peroxidase enzyme is conjugated to the constant heavy chain of the secondary antibody (either covalently or via Avidin/Streptavidin-Biotin interactions), allowing for a colorimetric reaction to ensue upon substrate addition. When the substrate TMB (3, 3', 5, 5'-Tetramethylbenzidine) is added, the reaction catalyzed by peroxidase yields a blue color that is representative of the antigen concentration. Upon sufficient color development, the reaction can be terminated through addition of Stop Solution (2 N Sulfuric Acid) where the color of the solution will turn yellow. The absorbance of each well can then be read by a spectrophotometer, allowing for generation of a standard curve and subsequent determination of protein concentration.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6680109
NCBI GeneID	14825
NCBI Accession #	NP_032202.1
NCBI GenBank Nucleotide #	NM_008176.3
UniProt Accession #	P12850
Molecular Weight	10,254 Da
NCBI Official Full Name	growth-regulated alpha protein
NCBI Official Synonym Full Names	chemokine (C-X-C motif) ligand 1
NCBI Official Symbol	Cxcl1
NCBI Official Synonym Symbols	KC; Fsp; N51; gro; Gro1; Mgsa; Scyb1
NCBI Protein Information	growth-regulated alpha protein
UniProt Protein Name	Growth-regulated alpha protein
UniProt Gene Name	Cxcl1
UniProt Synonym Gene Names	Gro; Gro1; Mgsa; Scyb1; HSF

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.

