

Human chemokine (C-C motif) ligand 21 ELISA Kit | CCL21 elisa kit

Human secondary lymphoid-tissue chemokine, SLC ELISA Kit

CATALOG #
AAA79980

REACTIVITY
Human

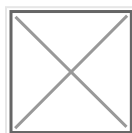
PRODUCT SYNONYMS

chemokine (C-C motif) ligand 21; Human secondary lymphoid-tissue chemokine; SLC ELISA Kit; 6Ckine; CKb9; ECL; MGC34555; SCYA21; SLC; TCA4; Efficient Chemoattractant for Lymphocytes; beta chemokine exodus-2; exodus-2; secondary lymphoid tissue chemokine; small inducible cytokine A21; small indu; CCL21 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human CCL21. No significant cross-reactivity or interference between Human CCL21 and analogues was observed.
Sequence Length	134
Detection Range	78 pg/ml-5000 pg/ml
Sensitivity	20 pg/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Protein Biological Process 1	Immunity
Protein Biological Process 2	chemokine
Protein Biological Process 3	Chemotaxis
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CCL21 elisa kit

Introduction: Secondary Lymphoid-tissue Chemokine (SLC) is a recently identified CC chemokine that is constitutively expressed in various lymphoid tissues and is a potent and specific chemoattractant for lymphocytes. The SLC gene and the gene encoding another lymphocyte-specific CC chemokine, EB11-ligand chemokine (ELC), form a mini-cluster at human chromosome 9p13. Here, we show that SLC is a high affinity functional ligand for chemokine receptor 7 (CCR7) that is expressed on T and B lymphocytes and a known receptor for ELC. SLC induced a vigorous calcium mobilization in murine L1.2 cells stably expressing human CCR7. SLC tagged with the secreted form of alkaline phosphatase (SLC-SEAP) showed specific binding to CCR7 that was fully competed by SLC with an IC50 of 0.5 nm. SLC also induced a vigorous chemotactic response in CCR7-expressing L1.2 cells with a typical bell-shaped dose-response curve and a maximal migration at 10 nm. When assessed using CCR7-transfected L1.2 cells, SLC and ELC were essentially equivalent in terms of cross desensitization in calcium mobilization via CCR7, cross-competition in binding to CCR7, and induction of chemotaxis via CCR7. SLC and ELC were also shown to fully share receptors expressed on cultured normal T cells known to express CCR7. Notably, however, SLC was somehow less efficient in cross-desensitization against ELC in calcium mobilization and in cross-competition with ELC for binding when assessed using cultured normal T cells. Thus, SLC and ELC, even though sharing only 32% amino acid identity, constitute a genetically and functionally highly related subgroup of CC chemokines.

Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to SLC. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for SLC and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain SLC, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of SLC in the samples is then determined by comparing the O.D. of the samples to the standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506835
NCBI GeneID	6366
NCBI Accession #	NP_002980.1
NCBI GenBank Nucleotide #	NM_002989.3
UniProt Accession #	O00585
Molecular Weight	14,646 Da
NCBI Official Full Name	C-C motif chemokine 21
NCBI Official Synonym Full Names	chemokine (C-C motif) ligand 21
NCBI Official Symbol	CCL21
NCBI Official Synonym Symbols	ECL; SLC; CKb9; TCA4; 6Ckine; SCYA21
NCBI Protein Information	C-C motif chemokine 21; beta chemokine exodus-2; secondary lymphoid tissue chemokine; Efficient Chemoattractant for Lymphocytes; small inducible cytokine subfamily A (Cys-Cys), member 21
UniProt Protein Name	C-C motif chemokine 21
UniProt Gene Name	CCL21
UniProt Synonym Gene Names	SCYA21; UNQ784/PRO1600; SLC
UniProt Entry Name	CCL21_HUMAN

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.