

Exodus-2/CCL21 Protein, Human (sf9)

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| Cat. No.: | HY-P72875 |
| Synonyms: | C-C motif chemokine 21; Beta-chemokine exodus-2; 6Ckine; SLC; CCL21; SCYA21 |
| Species: | Human |
| Source: | Sf9 insect cells |
| Accession: | O00585 (S24-P134) |
| Gene ID: | 6366 |
| Molecular Weight: | Approximately 18 kDa |

PROPERTIES

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| AA Sequence | <p> M A Q S L A L S L L I L V L A F G I P R T Q G S D G G A Q D C C L K Y S Q R K I P A K V V R S Y R K Q E P S L G C S I P A I L F L P R K R S Q A E L C A D P K E L W V Q Q L M Q H L D K T P S P Q K P A Q G C R K D R G A S K T G K K G K G S K G C K R T E R S Q T P K G P </p> |
| Biological Activity | Measured by its binding ability in a functional ELISA. Immobilized Exodus-2/CCL21 Protein, Human (sf9) at 2 µg/mL (100 µl/well) can bind human IGFBP7 with a linear range of 0.16-4 µg/mL. |
| Appearance | Lyophilized powder. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 40 mM Tris, 0.3 M NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. |
| Endotoxin Level | <1 EU/µg, determined by LAL method. |
| Reconstitution | It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. |
| Storage & Stability | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| Shipping | Room temperature in continental US; may vary elsewhere. |

DESCRIPTION

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| Background | <p>CCL21, also known as exodus-2 and secondary lymphoid chemokine (SLC), is a small cytokine belonging to the CC chemokine family and is located on chromosome 9 in the human genome. It binds to glycosaminoglycan (GAG) and is anchored to the surface of endothelial cells. As a chemokine, CCL21 inhibits hematopoiesis and stimulates chemotaxis, and is chemotactic in vitro for thymocytes and activated T cells, but not for B cells, macrophages or neutrophils. At the same time, CCL21 is a potent stimulator of T cell migration and adhesion, binding to the glycoprotein PSGL-1 on T cells to</p> |
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promote the migration of T cells to secondary lymphoid organs. CCL21 can act through chemokine receptors CCR7 and CXCR3. Among them, CCR7 is a GPCR that is normally expressed by T cell subsets central memory cells, thymic T cells, B cells, mature DCs and other rare cell subsets. ccl21 can function as a microglia activator in the CNS and is expressed exclusively in endangered or mechanically damaged neurons^{[1][2]}.

REFERENCES

- [1]. Balsam Rizeq, et al. The Role of CCL21/CCR7 Chemokine Axis in Breast Cancer Progression. *Cancers (Basel)*. 2020 Apr 23;12(4):1036.
- [2]. Knut Biber, et al. Neuronal CCL21 up-regulates microglia P2X4 expression and initiates neuropathic pain development. *EMBO J*. 2011 May 4;30(9):1864-73.
- [3]. Marieke Bax, et al. Interaction of polysialic acid with CCL21 regulates the migratory capacity of human dendritic cells. *PLoS One*. 2009 Sep 14;4(9):e6987.
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Caution: Product has not been fully validated for medical applications. For research use only.

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