Recombinant Mouse CXCL12/SDF-1 Protein



RPCB1876

Product Information

Product SKU: RPCB1876 **Gene ID**: 20315 **Size**: 10μg

Tag: NO-tag Reactivity: Mouse

Additional Information

Expression Host: Pichia **Swissprot**: P40224-1

Purity: -

Protein Information

Background:

Mouse Cxcl12 is a secreted and highly conserved protein which belongs to the intercrine alpha (chemokine CxC)family.CXCL12 is widely expressed in various organs including brain, kidney, skeletal muscle, heart, liver, and lymphoidorgans. Cxcl12 activates the C-X-C chemokine receptor CXCR4 to induce a rapid and transient rise in the level ofintracellular calcium ions and chemotaxis. It also binds to atypical chemokine receptor ACKR3 which activates the beta-arrestin pathway and acts as a scavenger receptor for SDF-1. Cxcl12 has several critical functions during embryonicdevelopment such as B-cell lymphopoiesis, myelopoiesis in bone marrow and heart ventricular septum formation. Cxcl12plays an important role in acting as a positive regulator of monocyte migration and a negative regulator of monocyteadhesion via the LYN kinase. It stimulates migration of monocytes and Tlymphocytes through its receptors, CXCR4 and ACKR3, and decreases monocyte adherence to surfaces coated with ICAM-1, a ligand for beta-2 integrins. SDF1A/CXCR4signaling axis inhibits beta-2 integrin LFA-1 mediated adhesion of monocytes to ICAM-1 through LYN kinase. It also plays aprotective role after myocardial infarction, induces down-regulation and internalization of ACKR3 expressed in various cellsand stimulates the proliferation of bone marrow-derived b progenitor cells in the presence of IL-7 as well as growth of thestromal celldependent B-cell clone DW34 cells.

Protein Description: High quality, high purity and low endotoxin recombinant Recombinant Mouse

CXCL12/SDF-1 Protein , tested reactivity in Pichia and has been validated in SDS-

PAGE.100% guaranteed.

Endotoxin: $<1EU/\mu g$ of the protein by LAL method.

Formulation: Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Storage: Store at -20°C.Store the lyophilized protein at -20°C to -80 °C up to 1 year from the

date of receipt.After reconstitution, the protein solution is stable at -20°C for 3

months, at 2-8°C for up to 1 week.