

DATASHEET
Version 20181206**HCC-4/CXCL16, Mouse****Cat. No.:** Z03342-1**Size:** 1.0 mg**Synonyms:** SRPSOX**Description:**

Chemokine (C-X-C motif) ligand 16 (CXCL16) is a small cytokine belonging to the CXC chemokine family. CXCL16 is composed of a CXC chemokine domain, a mucin-like stalk, a transmembrane domain and a cytoplasmic tail containing a potential tyrosine phosphorylation site that may bind SH2. The CXCL16 gene codes for a 273 amino acid polypeptide, which includes a 29 amino acid cytoplasmic domain and transmembrane sequence containing approximately 20 amino acids. Mouse CXCL16 is produced by dendritic cells in lymphoid organ T cell zones and by cells in the splenic red pulp both as membranebound and soluble forms. Based on northern blot analysis, CXCL16 is also expressed in some nonlymphoid tissues such as lung, small intestine and kidney. The receptor for CXCL16 has been identified as CXCR6/Bonzo (STRL33 and TYMSTR), a receptor previously shown to be a co-receptor for HIV entry. CXCR6 is expressed on naive CD8 cells, natural killer T cells and activated CD8 and CD4 T cells. Recombinant Mouse HCC-4/CXCL16 produced in *E. coli* is a single non-glycosylated polypeptide chain containing 89 amino acids. A fully biologically active molecule, rmHCC-4/CXCL16 has a molecular mass of 10.1 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 MNQGSVAGSC SCDRTISSGT QIPQGTLDHI RKYLKAFHRC
00041 PFFIRFQLQS KSVCGGSQDQ WVRELVDCFE RKECGTGHGK
00081 SFHHQKHL P

Source: *E. coli*

Biological Activity: The EC₅₀ value of Mouse HCC-4/CXCL16 on Ca²⁺ mobilization assay in CHO-K1/Gα15/mCXCR6 cells (human Gα15 and mouse CXCR6 stably expressed in CHO-K1 cells) is less than 5 µg/ml.

Molecular Weight: 10.1 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant Mouse HCC-4/CXCL16 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse HCC-4/CXCL16 should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.