

DATASHEET Version 20181206

Thymus Chemokine ☐ 1/CXCL7, Rat

Cat. No.: Z03280-5

Size: 5.0 ug

Synonyms: Thymus Chemokine-1,TCK-1

Description:

Thymus Chemokine 1, also called Chemokine (C-X-C motif) ligand 7 (CXCL7), is a member of the CXC chemokines. Similar to other ELR domain containing CXC chemokines such as IL-8 and the GRO proteins, Thymus Chemokine □1 has been shown to bind CXCR-2 and be a chemoattractant forneutrophils and play a role in their activation. Although CTAP-III, β-TG and PBP represent amino-terminal extended variants of Thymus Chemokine 1 and possess the same CXC chemokine domains, these proteins do not exhibit Thymus Chemokine 1 activity. Recently, it has been shown that the additional amino-terminal residues of CTAP-III mask the critical ELR receptor binding domain that is exposed on Thymus Chemokine ☐ 1 and may account for lack of Thymus Chemokine ☐ 1 activity. Rat CXCL7 shares 72% amino acid sequence identity with mouse CXCL7. Recombinant rat Thymus Chemokine 1/ CXCL7 produced in CHO cells is a polypeptide chain containing 62 amino acids. A fully biologically active molecule, rrThymus Chemokine 1/CXCL7 has a molecular mass of 9.8 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 IELRCRCTNT LSGIPLNSIS RVNVFRPGAH CDNVEVIATL

00041 KNGKEVCLDP TAPMIKKIVK KI

Source: CHO Species: Rat

Biological Activity: The EC₅₀ value of rat Thymus Chemokine \Box 1/CXCL7 on Ca²⁺ mobilization assay in CHO-K1/G α 15/rCXCR2 cells (human G α 15 and rat CXCR2 stably expressed in CHO-K1 cells) is less than 300 ng/ml.

Molecular Weight: 9.8 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

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

Purity: > 97% as analyzed by SDS-PAGE and HPLC.

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

Storage: Lyophilized recombinant Rat Thymus Chemokine 1/CXCL7 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Rat Thymus Chemokine 1/CXCL7 should be stable up to 1 week at 4°C or up to 3 months at -20°C.