

DATASHEET

Version 20181206

Thymus Chemokine \square 1/CXCL7, Rat

Cat. No.: Z03280-25

Size: 25.0 μ g

Synonyms: Thymus Chemokine-1, TCK-1

Description:

Thymus Chemokine \square 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 \square 1 has been shown to bind CXCR-2 and be a chemoattractant for neutrophils and play a role in their activation. Although CTAP-III, β -TG and PBP represent amino-terminal extended variants of Thymus Chemokine \square 1 and possess the same CXC chemokine domains, these proteins do not exhibit Thymus Chemokine \square 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 \square 1 and may account for lack of Thymus Chemokine \square 1 activity. Rat CXCL7 shares 72% amino acid sequence identity with mouse CXCL7. Recombinant rat Thymus Chemokine \square 1/ CXCL7 produced in CHO cells is a polypeptide chain containing 62 amino acids. A fully biologically active molecule, rrThymus Chemokine \square 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 EC_{50} value of rat Thymus Chemokine \square 1/CXCL7 on Ca^{2+} 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 μ g/ml.

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

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

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