

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant Thymus Chemokine-1/CXCL7, Rat

Catalog Number: BK0286-1mg

Source: CHO

Quantity: 1mg

### 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 for neutrophils and play a role in their activation. Although CTAP-III,  $\beta$ -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.

### Molecular Weight:

9.8 kDa, observed by reducing SDS-PAGE.

### Purity:

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

### Biological Activity:

The EC<sub>50</sub> value of rat Thymus Chemokine-1/CXCL7 on Ca<sup>2+</sup> mobilization assay in

CHO-K1/G $\alpha$ 15/rCXCR2 cells (human G $\alpha$ 15 and rat CXCR2 stably expressed in CHO-K1 cells) is less than 300 ng/ml.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

IELRCRCTNTLSGIPLNSISRNVNFRPGAHCND-  
VEVIATLKNGKEVCLDPTAPMIKKIVKKI

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

### Storage:

Lyophilized recombinant Rat Thymus Chemokine-1/CXCL7 remains stable up to 6 months at -80 °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.

### Usage:

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