bio-techne
TOCRIS

Print Date: Oct 4th 2024

Certificate of Analysis

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Product Name: **Compstatin** **Catalog No.: 2585** **Batch No.: 26**

CAS Number: 206645-99-0

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{66}H_{99}N_{23}O_{17}S_2$

Batch Molecular Weight: 1550.77

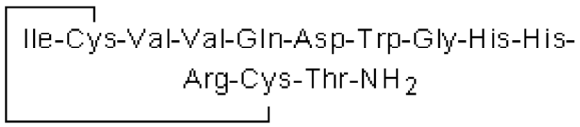
Physical Appearance: White lyophilised solid

Counter Ion: TFA

Solubility: Soluble to 2 mg/ml in water

Storage: Store at -20°C

Peptide Sequence:



2. ANALYTICAL DATA

HPLC: Shows 97.9% purity

Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid	Theoretical	Actual	Amino Acid	Theoretical	Actual
Ala			Lys		
Arg	1.00	1.01	Met		
Asx	1.00	0.57	Phe		
Cys	2.00	Not Detected	Pro		
Glx	1.00	1.00	Ser		
Gly	1.00	1.00	Thr	1.00	1.03
His	2.00	1.90	Trp	1.00	Not Detected
Ile	1.00	0.95	Tyr		
Leu			Val	2.00	1.70

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Product Name: **Compstatin** **Catalog No.: 2585** **26**

CAS Number: 206645-99-0

Description:

Compstatin is a complement inhibitor; binds C3 inhibiting proteolytic cleavage by C3 convertase (IC_{50} = 28 µM) and activation of classical and alternative complement pathways (IC_{50} values are 63 and 12 µM respectively). Prolongs graft survival and reduces hyperacute rejection of ex vivo pig kidneys perfused with human blood and inhibits in vivo heparin/protamine-induced complement activation in primates. Control Peptide also available.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{66}H_{99}N_{23}O_{17}S_2$

Batch Molecular Weight: 1550.77

Physical Appearance: White lyophilised solid

Peptide Sequence:

Ile-Cys-Val-Val-Gln-Asp-Trp-Gly-His-His-Arg-Cys-Thr-NH_2

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 2 mg/ml in water

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such Cys, Met,Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 µm filter to remove potential bacterial contamination whenever possible.

References:

Soulika *et al* (2000) Inhibition of heparin/protamine complex-induced complement activation by compstatin in baboons. Clin.Immunol. ***96*** 212. PMID: 10964539.

Fiane *et al* (1999) Compstatin, a peptide inhibitor of C3, prolongs survival of ex vivo perfused pig xenografts. Xenotransplantation ***6*** 52. PMID: 10355733.

Sahu *et al* (1996) Inhibition of human complement by a C3-binding peptide isolated from a phage-displayed random peptide library. J.Immunol. ***157*** 884. PMID: 8752942.