

Product Name : Compstatin

Synonyms : —

Cat No. : M22319

CAS Number : 206645-99-0

Molecular Formula : C66H99N23O17S2

Formula Weight : 1550.77

Chemical Name : —

Description : Compstatin, a cyclic tridecapeptide, which was originally discovered from phage-display libraries, is a highly potent and selective C3 inhibitor. Compstatin binds to baboon C3 and is resistant to proteolytic cleavage in baboon blood (similar to humans); Compstatin inhibits only the activation of primates' complement system. Compstatin (21 mg/kg) produces complete inhibition when given as a combination of bolus injection and infusion. Compstatin completely inhibits in vivo heparin/protamine-induced complement activation without adverse effects on heart rate or systemic arterial, central venous, and pulmonary arterial pressures. Pig xenografts survival is significantly longer in the Compstatin perfused group than in the control group. At rejection the biopsy samples obtained from kidneys perfused with Compstatin show less deposition of C3 and fibrin than do the control kidneys.

Pathway : Immunology/Inflammation

Target : Complement System

Receptor : Complement System

Solubility : DMSO:300 mg/mL (193.45 mM)

SMILES : CC[C@@H](C)[C@H](N)C(=O)N[C@@H]1CSCC[C@H](NC(=O)[C@H](CCCNC(N)=N)NC(=O)[C@H](Cc2c[nH]cn2)NC(=O)[C@H](Cc2c[nH]cn2)NC(=O)CNC(=O)[C@H](Cc2c[nH]c3ccccc23)NC(=O)[C@H](CC(O)=O)NC(=O)[C@H](CCC(N)=O)NC(=O)[C@@H](NC(=O)[C@@H](NC1=O)C(C)C)C(=O)N[C@@H]([C@@H](C)O)C(N)=O

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1.Soulaka AM, et al. Inhibition of heparin/protamine complex-induced complement activation by Compstatin in baboons. Clin Immunol. 2000 Sep;96(3):212-21.