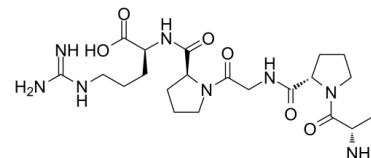


Data Sheet

Product Name:	Enterostatin(human,mouse,rat)
Cat. No.:	CS-0026705
CAS No.:	117830-79-2
Molecular Formula:	C ₂₁ H ₃₆ N ₈ O ₆
Molecular Weight:	496.56
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Solubility:	DMSO : 125 mg/mL (251.73 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Enterostatin, human, mouse, rat is a pentapeptide that reduces fat intake. **In Vitro:** In the perfused rat pancreas, Enterostatin, at 100 mM, inhibits the insulin response to 9 mM glucose (by 70%), 0.1 mM tolbutamide (by 40%), and 5 mM arginine (by 70%)^[1]. **In Vivo:** Chronically, enterostatin reduces fat intake, bodyweight, and body fat. This response may involve multiple metabolic effects of enterostatin, which include a reduction of insulin secretion, an increase in sympathetic drive to brown adipose tissue, and the stimulation of adrenal corticosteroid secretion^[2]. Enterostatin enhances memory consolidation after central or oral administration at a dose of 10 nmol/mouse or 300 mg/kg, respectively, in a step-through type passive avoidance test in mice^[3]. A dose of 38 nmol of enterostatin gives a significant inhibition of high-fat food intake, while at a higher dose of 76 nmol the inhibiting effect is lost. During the first hour, after injection of enterostatin, there is even a slight increase in food intake^[4].

References:

- [1]. Silvestre RA, et al. Effect of enterostatin on insulin, glucagon, and somatostatin secretion in the perfused rat pancreas. *Diabetes*. 1996 Sep;45(9):1157-60.
- [2]. Erlanson-Albertsson C, et al. Enterostatin--a peptide regulating fat intake. *Obes Res*. 1997 Jul;5(4):360-72.
- [3]. Ohinata K, et al. Enterostatin (APGPR) enhances memory consolidation in mice. *Peptides*. 2007 Mar;28(3):719-21.
- [4]. Sörhede M, et al. Enterostatin: a gut-brain peptide regulating fat intake in rat. *J Physiol Paris*. 1993;87(4):273-5.

CAIndexNames:

L-Arginine, L-alanyl-L-prolylglycyl-L-prolyl-

SMILES:

N=C(N)NCCC[C@@H](C(O)=O)NC([C@H]1N(CCC1)C(CNC([C@H]2N(CCC2)C([C@@H](N)C)=O)=O)=O)=O

Caution: Product has not been fully validated for medical applications. For research use only.

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