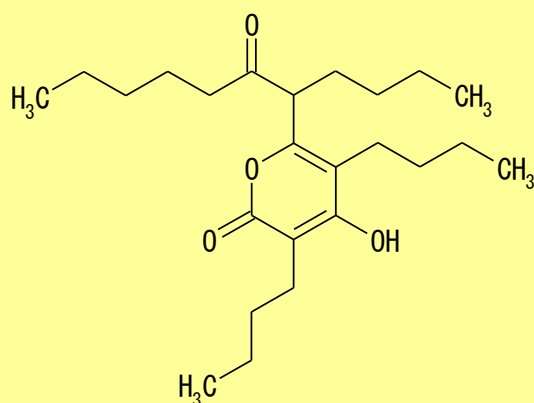


Elasnin

Cat.# BLK0630

Structure



Origin: *Streptomyces sp.*

CAS Registry Number: 68112-21-0

CA Index Name: Elastin
3,5-Dibutyl-6-(1-butyl-2-oxoheptyl)-
4-hydroxy-2H-pyran-2-one

Appearance: supplied as DMSO(5mg/ml) solution

Molecular Formula/ Weight: C₂₄H₄₀O₄=392.58

Melting Point: - **Purity:** 90>% by HPLC

Solubility: Sol. 1mg/ml ethanol, methanol, DMSO

pKa: **log P:**

Background Information:

Elasnin, a new human granulocyte elastase highly specific inhibitor, was isolated from a fermentation broth of a *Streptomyces noboritoensis* KM-2753¹⁾. Elasnin inhibits markedly human granulocyte elastase, but is almost ineffective for pancreatic elastase, trypsin, chymotrypsin, thermolysin and papain²⁾.

Activities:

Protease	ID ₅₀ (ug/ml)					
	Elasnin	Elastatinal	R-Ala-Ala-R'	R-Pro-Ala-R'	R-Pro-Ile-R7	R-Pro-Val-R'
Granulocyte Elastase	1.3	>200	>200	>200	7.8	18
Pancreatic Elastase	30.1	0.63	14.3	3.8	2.1	6.4
Chymotrypsin	82	>200	>200	>200	>200	>200
Trypsin	90	>200	>200	>200	>200	>200

50% Inhibitory Dose: the concentration which inhibits 50% of the enzyme activity²⁾

R: -Ala-Ala-Ac

R': -CH₂Cl

Handling and Storage:

Store at -20°C.

References:

1. S. Ōmura, et al. Biochem. Biophys. Res. Commun. **83**, 704-709 (1978).
2. H. Ohno, et al. J Antibiot. **31**, 1116-1123 (1978).

Manufactured with Cortesy strain from The Kitasato Institute.