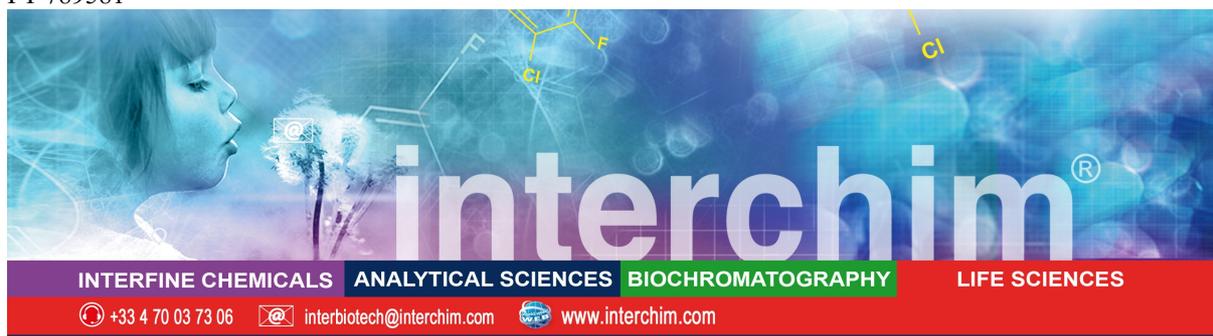


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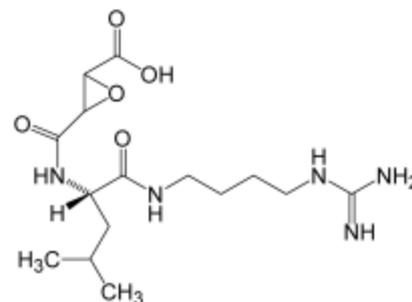


E-64, Cysteine Protease inhibitor

Inhibitors for Thiol Proteases

Products Description

Name :	E-64 [L-3-trans-Carboxyoxiran-2-Carbonyl]-L-Leu-Agmatin] ; [N-(trans-epoxysuccinyl)-L-leucine 4-guanidinobutylamide] CAS : 66701-25-5
Catalog Number :	UP789581, 5mg UP789582, 25mg
Molecular Weight :	357.41 kDa
Soluble in:	readily in water, and stable
Storage:	Room Temperature, protect from moisture. Long term storage at -20°C

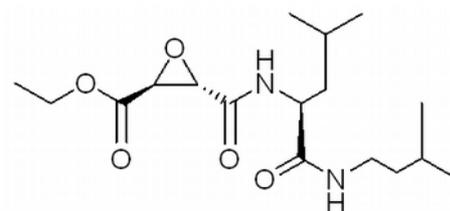


Inhibitor for Thiol Proteases. Inhibitor for papain and other cysteine (thiol) proteases. Affects different biological processes, as metastasis formation in mice.

Name :	E-64-C [(2S,3S)- 3- Carboxyoxirane- 2- carbonyl]- L- leucine (3-methylbutyl)amide ; NSC694279 ; Loxistatin acid ; EP475 CAS : 76684-89-4
Catalog Number :	UP827140, 5mg
Molecular Weight :	314.38 kDa
Soluble in:	ethanol, DMSO: >10 mg/mL
Storage:	-20°C

Inhibitor for Thiol Protease (Cathepsin B/H/L, Calpain)

Name :	E-64-D [(2S,3S)- 3- Ethoxycarbonyloxirane- 2- carbonyl]- L- leucine(3-methylbutyl)amide]
Catalog Number :	UP827190, 5mg
Molecular Weight :	342.43 kDa
Soluble in:	ethanol, DMSO: >10 mg/mL
Storage:	-20°C



Inhibitor for Thiol Protease (Cathepsin B/H/L, Calpain)
Membrane Permeable Analog of E-64-c

Products Information

- Cysteine proteases are a class of enzymes containing an active-site cysteine residue that are important in protein degradation pathways.
- **E-64** is an effective irreversible inhibitor of cysteine proteases, isolated for *Aspergillus japonicus*. It does not affect cysteine residues in other enzymes.

This compound is of the epoxysuccinate class of inhibitors, which affect primarily cysteine peptidases in clan CA. It acts by forming a thioether bond after with the thiol of the active cysteine causing irreversible inhibition (S-alkylation of the catalytic cysteine, which results in opening of the epoxide ring). Powers *et al.* (2002) provide an authoritative review of epoxysuccinyl peptides as peptidase inhibitors. E-64 is an excellent active-site titrant of cysteine proteinases.

Physicochemical properties: E-64 is soluble in aqueous solutions (stock solution 1 mM). Stable from pH 2.0 to pH 10.0 but unstable in ammonia or strong acids, which destroy the epoxide ring.

Working concentration: 0.5 - 10 mg/ml (0.14 - 28 mM)

- **E-64-C** is a ethyl ester synthetic analog of E-64.
- **E-64-D** is a ethyl ester synthetic analog of E-64. It is cell permeable and hydrolysed in cell to E-64-c. E-64d arrest the growth of A431 cells in metaphase at concentrations between 20 and 200µg/ml.

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FT-789581

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- CA-074 Me (L-trans-epoxysuccinyl-Ile-Pro-Ome-propylamide), [UP827180](#)
- MG132 (Z-Leu-Leu-Leu-al), [UP831940](#)
- Calpain inhibitor II (N-acetyl-Leu-Leu-Met-al), [CE0490](#)
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