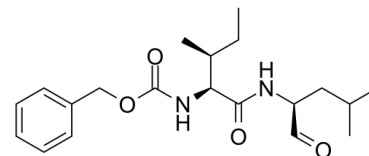


Data Sheet

Product Name:	Z-Ile-Leu-aldehyde
Cat. No.:	CS-3642
CAS No.:	161710-10-7
Molecular Formula:	C ₂₀ H ₃₀ N ₂ O ₄
Molecular Weight:	362.46
Target:	Apoptosis; Notch; γ -secretase
Pathway:	Apoptosis; Neuronal Signaling; Stem Cell/Wnt
Solubility:	DMSO : \geq 41 mg/mL (113.12 mM)



BIOLOGICAL ACTIVITY:

Z-Ile-Leu-aldehyde (Z-IL-CHO) is a potent and competitive peptide aldehyde inhibitor of γ -secretase and notch^{[1][2]}. **In Vitro:** Z-Ile-Leu-aldehyde (ILCHO) significantly downregulates Th17-associated cytokine levels in murine Th17 in vitro polarization assays^[1]. Z-Ile-Leu-aldehyde (GSI XII) induces apoptosis of murine MOPC315.BM myeloma cells with high Notch activity^[2]. **In Vivo:** Z-Ile-Leu-aldehyde (GSI XII, 10 mg/kg, Intraperitoneally either for 14 days) controls myeloma bone disease mainly by targeting Notch in MM cells and possibly in osteoclasts in their microenvironment^[2].

References:

[1]. Reem Suleiman, et al. The Role Of Notch In Th17 Differentiation. University of Massachusetts Amherst. 9-2013.

[2]. Schwarzer R, et al. Notch pathway inhibition controls myeloma bone disease in the murine MOPC315.BM model. Blood Cancer J. 2014 Jun 13;4:e217.

CAIndexNames:

Carbamic acid, N-[(1S,2S)-1-[[[(1S)-1-formyl-3-methylbutyl]amino]carbonyl]-2-methylbutyl]-, phenylmethyl ester

SMILES:

O=C(OCC1=CC=CC=C1)N[C@H](C(N[C@H](C=O)CC(C)C)=O)[C@@H](C)CC

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

Tel: 732-484-9848

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA