

Product number **A108**
Revision number **RN3.0**

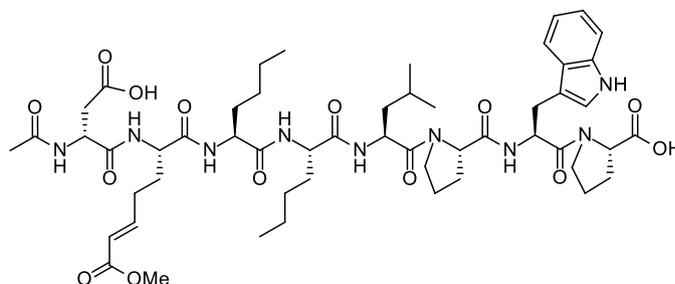
Product Name Ac-Asp-MA-Nle-Nle-Leu-Pro-Trp-Pro-OH
Synonym ZED1301
Application Site specific irreversible inhibitor of plasma transglutaminase (factor XIII, FXIII)
Peptidic inhibitor containing an electrophilic Michael acceptor (MA) warhead
Efficacy ZED1301 shows 30-fold selectivity for FXIII compared to tissue transglutaminase
 $IC_{50} = 100$ nM (FXIII, using fluorescent Assay Substance A101^[1])
 $IC_{50} = 3000$ nM (TG2, using fluorescent Assay Substance A101^[1])

^[1]Oertel *et al. Anal. Biochem.* **2007**, 367, 152.

Molecular Formula C₅₃H₇₇N₉O₁₄

Molecular Weight 1064.23

Chemical Structure



Purity by HPLC >95 % (214 nm)

Solubility 3.50 mg/ml (3.28 mM) in PBS buffer

Alternative 10 µM in 0.1% (v/v) DMSO / aqueous buffers

Pre-dissolve e.g. 2.15 mg (2.02 µmol) in 202 µl DMSO - dilute e.g. 10 µl of that stock solution (10 mM) with 9990 µl aqueous buffer to obtain a 10 µM solution. DMSO stock solutions can be stored at -20°C for at least 6 months. To avoid too many freeze-thaw cycles, we strongly recommend storage of aliquots.

Appearance Off-white solid

Storage Store at -20°C, desiccate

Related products T027 Human blood coagulation Factor XIII (hFXIII, recombinant)
A101 FXIII-Assay Substance
F001 FXIII-Assay Kit

Reference(s) Stieler, M. *et al. Angewandte Chemie Intl. Ed.* **2013**, 52, 11930.

Release date 22 May 2023

NOTE INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.