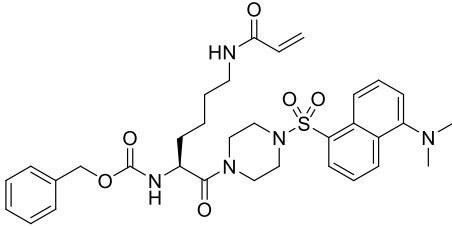


Product Number **Z017**
Revision Number **RN2.0**

Product Name	Keillor inhibitor VA4
CAS	2088001-23-2
Application	<p>Irreversible transglutaminase inhibitor that shows good selectivity for tissue transglutaminase.</p> <p>$K_i = 13 \mu\text{M}$; $k_{\text{inact}}/K_i = 0.11 \mu\text{M}^{-1}\text{min}^{-1}$ [1]</p> <p>Shown to lock tissue transglutaminase in an open conformation in living cells [2], and to abolish GTP binding[1].</p> <p>Halts the proliferation and invasion of cancer stem cells with $\text{EC}_{50} = 3.9 \mu\text{M}$[1].</p>
Molecular Formula	$\text{C}_{33}\text{H}_{41}\text{N}_5\text{O}_6\text{S}$
Molecular Weight	635.77
Chemical Structure	
Purity by HPLC	>95 % (214 nm)
Solubility	<p>100 μM in 20% (v/v) DMSO / aqueous buffers.</p> <p>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.</p>
Selectivity & Cytotoxicity	<p>k_{rel} for irreversible inactivation was determined to be 394 for TG2, 8.3 for TG1, 0.65 for TG3a, not detectable for TG6 and 4.1 for FXIIIa (Data taken from Akbar <i>et al.</i>[1]).</p>
Appearance	Yellow, fluorescent solid
Storage	Store at -20°C , desiccate, keep away from light.
Related Products	<p>Z015 Keillor inhibitor AA9 Z016 Keillor inhibitor NC9 Z006 Z-DON-Val-Pro-Leu-OMe, "Z-DON" B003 Boc-DON-Gln-Ile-Val-OMe, Boc-DON A102 TG2-Assay Substance F002 Tissue Transglutaminase Assay Kit T002 Human tissue transglutaminase</p>
Reference(s)	<p>[1] A. Akbar <i>et al. J. Med. Chem.</i> 2017, 60, 7910-7927. [2] Kerr, C. <i>et al. Oncogene</i> 2017, 36, 2981-2990.</p>
Release date	30 December 2021
NOTE	INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.