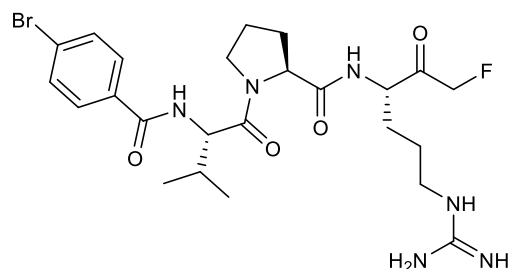


SCM-02-138

Chemical Formula: C₂₄H₃₄BrFN₆O₄
Molecular Weight: 569.48

Category	Parameter	Description
Compound	Name	SCM-02-138 (Cpd 3 in J Clin Inv; Cpd 22 in BMCL) <i>J Clin Invest.</i> 2018 , 128, 4397.
	Citation	https://www.ncbi.nlm.nih.gov/pubmed/30024860 <i>Bioorg Med Chem Lett.</i> 2019 , 29, 1336 https://www.ncbi.nlm.nih.gov/pubmed/30954428
	Chemical descriptors	O=C(CF)[C@H](CCCNC(N)=N)NC([C@@H]1CCCN1C([C@@H](NC(C2=CC=C(Br)C=C2)=O)C(C)C)=O)=O
	Chemical name	(S)-1-((4-bromobenzoyl)-L-valyl)-N-((S)-1-fluoro-6-guanidino-2-oxohexan-3-yl)pyrrolidine-2-carboxamide
	Entries in chemical databases	
	Availability	None
	Papers that use the compounds Additional comments	Compound was prepared as racemic at arginine residue for in vivo work
<i>In vitro</i> profiling	Target (potency)	MALT1 Ki 10nM;
	Target (potency)	
	Selectivity	Limited activity on other cysteine and serine proteases
	Potential reactivity	Forms covalent bond to cysteine at MALT1 active site, and
	SAR	Published in BMCL – good potency retained with modifications at proline, valine and LHS
	Mechanism of inhibition Structure of target-probe complex	Irreversible Published in <i>J Clin Inv</i> reference
Cellular profiling	Validation of cellular target Validation of cellular specificity	Compound was potent in cellular MALT1 protease assay, and OCI-Ly3 cell proliferation IC ₅₀ 0.13uM (MALT1-dependent cell line). The two cells assays showed a good correlation for the compounds tested.
	Pharmacodynamics	Effects on hIL10 in TMD8 PD model. Moderate efficacy in TMD8 and OCI-LY3 xenograft models upon IP dosing.
Pharmacokinetics	Mouse IV PK: T _{1/2} 0.25hr; Cl 13ml/min/kg	

