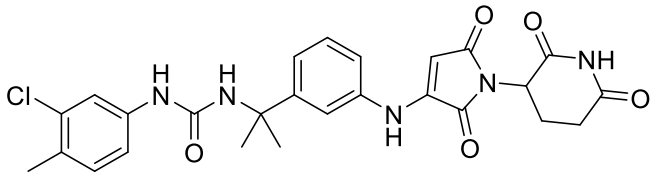
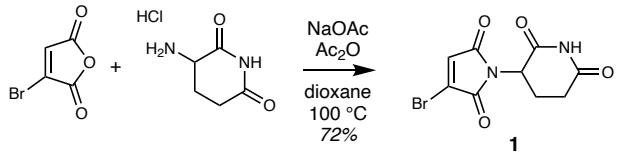
ALV-04-019-01



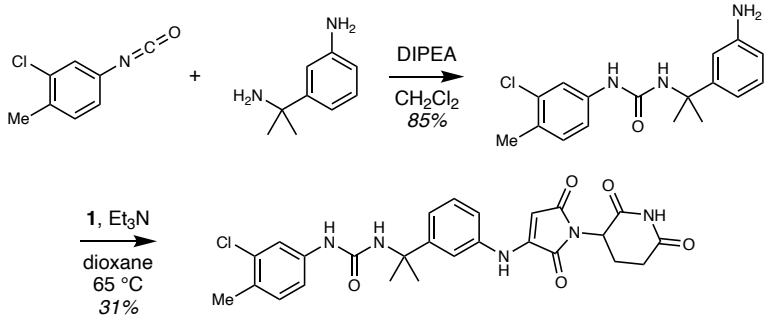
Chemical Formula: $C_{26}H_{26}ClN_5O_5$
Molecular Weight: 523.97

Category	Parameter	Description
Compound	Name	ALV-04-019-01 (ALV2)
	Citation	*Nat Chem Biol.* **2021** Jun 17(6): 711-717.
	Chemical descriptors	CC1=C(Cl)C=C(NC(=O)NC(C)(C)C2=CC=CC(NC3=CC(=O)N(C4CCC(=O)NC4=O)C3=O)=C2)C=C1
	Chemical name	1-(3-chloro-4-methylphenyl)-3-(2-(3-((1-(2,6-dioxopiperidin-3-yl)-2,5-dioxo-2,5-dihydro-1*H*-pyrrol-3-yl)amino)phenyl)propan-2-yl)urea
	Entries in chemical databases	
	Availability	
In vitro profiling	Target (potency)	CRBN-IKZF2 520/490 ratio Emax = 2.4 a.u. (compared to lenalidomide Emax = 0.38 a.u.)
	Target (potency)	CRBN binding TR-FRET IC50 = 0.57 μM
	Selectivity	
	Potential reactivity	
	SAR	
	Mechanism of inhibition	Degrader
	Structure of target-probe complex	7LPS
Cellular profiling	Validation of cellular target	ALV-04-019-01 degraded IKZF2 in IKZF2-GFP/RFP reporter cell line (DC50 = 4.3 nM; DCmax = 95.8%) ALV-04-019-01 degraded IKZF2 in Jurkat cells ALV-04-019-01 degraded IKZF2/4 in murine and human regulatory T cells
	Validation of cellular specificity	Proteomics in Jurkat cells and human regulatory T cells (Pride archive: PXD023691)
Pharmacodynamics		ALV-04-019-01 induced Helios degradation in splenic regulatory T cells
Pharmacokinetics		T1/2 = 2.16h; CL = 2.87 ml/min/kg; Vss=0.141 L/Kg; F= 0.472%



1

Synthetic scheme



ALV-04-019-01