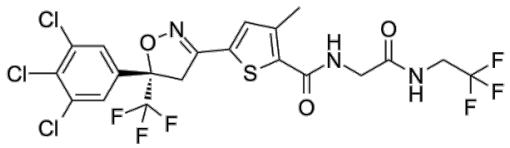
Product Data Sheet

Product Name: Lotilaner
Cat. No.: GC65292

Chemical Properties

Cas. No.	1369852-71-0		
Formula	C20H14Cl3F6N3O3S	M.Wt	596.76
Solubility	DMSO : ≥ 100 mg/mL (167.57 mM)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

Lotilaner is a parasiticide, acts as a potent non-competitive antagonist of insects GABACl receptors, with an IC50 of 23.84 nM for Drosophila melanogaster GABA receptor. No effect on a dog GABAA receptor[1].

Lotilaner shows IC50s of 38.25 ± 3.75, 52.40 ± 4.54, 36.79 ± 4.39 nM for Drosophila melanogaster dieldrin/fipronil-resistant forms (DmR2), Lepeophtheirus salmonis (Ls) and Rhipicephalus microplus (Rm) GABACl receptors, respectively[1].

[1]. Lotilaner, et al. The novel isoxazoline ectoparasiticide lotilaner (Credelio™): a non-competitive

antagonist specific to invertebrates γ-aminobutyric acid-gated chloride channels (GABACls). Parasit Vectors. 2017 Nov 1;10(1):530.