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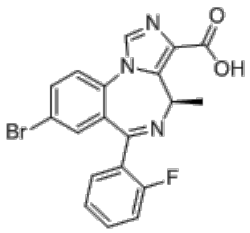
Datasheet (Version 1.0)

Product Name	:	MIDD0301
Synonyms	:	MIDD 0301;MIDD-0301
Cat No.	:	M13489
CAS Number	:	2187489-08-1
Molecular Formula	:	C19H13BrFN3O2
Formula Weight	:	414.23



Chemical Name	:	(R)-8-bromo-6-(2-fluorophenyl)-4-methyl-4H-benzo[f]imidazo[1,5-a][1,4]diazepine-3-carboxylic acid
Description	:	MIDD0301 is a potent, positive allosteric, α5β3γ2 selective, GABAA receptor (GABAAR) ligand with EC50 of 17 nM, shows no significant binding at the peripheral GABAAR at 10 uM; causes amplification of GABA induced current mediated by α1-3,5β3γ2 GABAARs in the presence of MIDD0301 in automated patch clamp test; relaxes airway smooth muscle at single micromolar concentrations as demonstrated with ex vivo guinea pig tracheal rings, also attenuates airway hyperresponsiveness (AHR) in an ovalbumin murine model of asthma by oral administration, with low brain distribution; reduces lung cytokine expression of IL-17A, IL-4, and TNF-α, as wells as the number of CD4+ T cells.
Pathway	:	Membrane Transporter/Ion Channel
Target	:	GAT
Receptor	:	GAT
Solubility	:	——
SMILES	:	——
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	

1. Forkuo GS, et al. Mol Pharm. 2018 Apr 2. doi: 10.1021/acs.molpharmaceut.7b01013.