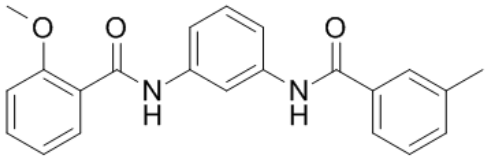
Product Data Sheet

Product Name: ML365
Cat. No.: GC36629

Chemical Properties

Cas. No.	947914-18-3		
SMILES	O=C(C1=C(OC)C=CC=C1)NC2=CC=CC(NC(C3=CC=CC(C)=C3)=O)=C2		
Formula	$C_{22}H_{20}N_2O_3$	M.Wt	360.41
Solubility	DMSO: ≥ 100 mg/mL (277.46 mM); Water: < 0.1 mg/mL (insoluble)	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



Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Background

ML365 is a novel selective small molecule inhibitor of TASK1(KCNK3) with IC50 of 4 nM(thallium influx fluorescent assay) and 16 nM(automated electrophysiology assay).IC50 value: 4 nM/16 nM(thallium influx fluorescent assay/automated electrophysiology assay) [1]Target: KCNK3 blockerML365 possesses more than 60-fold selectivity for inhibition of TASK1 over a closely-related, two-pore domain potassium channel, TASK3. ML365 displays little or no inhibition at 30 μM of more distantly related potassium channels, Kir2.1, potassium voltage-gated channel, KQT-like subfamily, member 2 (KCNQ2), and human ether-a go-go-related gene (hERG). Based on these criteria, ML365 is a best-in-class probe and is a useful pharmacological probe for in vitro studies of TASK1 function and in further studies aimed at developing therapeutic intervention.

[1]. Zou B, et al. ML365: Development of Bis-Amides as Selective Inhibitors of the KCNK3/TASK1 Two Pore Potassium Channel. Probe Reports from the NIH Molecular Libraries Program [Internet].

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA