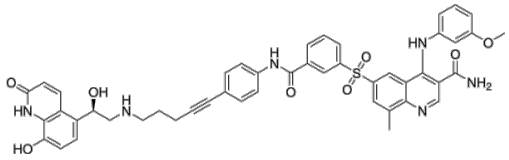
Product Data Sheet

Product Name: GS-5759
Cat. No.: GC79301

Chemical Properties

Cas. No.	1346653-91-5		
Formula	$C_{47}H_{42}N_6O_8S$	M.Wt	850.94
Solubility	DMSO: 100 mg/mL (117.52 mM; Need ultrasonic)	Storage	Store at -20°C, stored under nitrogen
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

GS-5759 is both a β2-adrenergic receptor agonist and a PDE4 inhibitor. GS-5759 increases intracellular cAMP levels by activating the β2 receptor, promoting bronchial dilation. GS-5759 inhibits PDE4 activity, reduces cAMP degradation, and enhances anti-inflammatory effects. GS-5759 exhibits

potent bronchial dilation and anti-inflammatory capabilities in animal models. GS-5759 can be used for research on respiratory diseases such as chronic obstructive pulmonary disease (COPD) [1] [2].

References:

[1]. Joshi T, et al. GS-5759, a Bifunctional β2-Adrenoceptor Agonist and Phosphodiesterase 4 Inhibitor for Chronic Obstructive Pulmonary Disease with a Unique Mode of Action: Effects on Gene Expression in Human Airway Epithelial Cells. J Pharmacol Exp Ther. 2017 Feb;360(2):324-340.
[2]. Salmon M, et al. The in vivo efficacy and side effect pharmacology of GS-5759, a novel bifunctional phosphodiesterase 4 inhibitor and long-acting β 2-adrenoceptor agonist in preclinical animal species. Pharmacol Res Perspect. 2014 Aug;2(4):e00046.

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