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DREADD agonist 21 dihydrochloride

http://cn.lumiprobe.com/p/dreadd-agonist-21-dihydrochloride

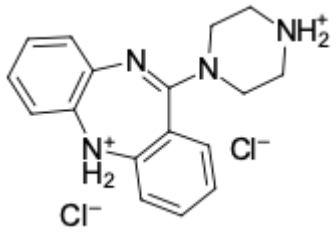
DREADD agonist 21 (Compound 21, C21) is a synthetic compound for selective activation of hM3Dq (excitatory) and hM4Di (inhibitory) DREADDs (*D*esigner *R*eceptor *E*xclusively *A*ctivated by *D*esigner *D*rugs) derived from the human muscarinic acetylcholine M3 (hM3) receptor. It does not agonize the hM3 receptor and displays weaker binding affinities for histamine H1, serotonin 5-HT2A, 5-HT2C, and α1A-adrenergic receptors (K_i = 6, 66, 170, and 280 nM, respectively) [1].

DREADD agonist 21 is routinely used as a chemogenetic tool for remotely controlling neuronal activity. It displays excellent brain permeability and capability to activate neurons expressing hM3Dq DREADDs and inhibit activity in neurons expressing hM4Di DREADDs *in vivo* [2].

This product is dihydrochloride salt, a water-soluble version of DREADD agonist 21.

[1] Chen X. et al. The first structure-activity relationship studies for designer receptors exclusively activated by designer drugs. ACS Chem. Neurosci. 2015. 6(3). 476-484.

[2] Thompson K.J. et al. DREADD agonist 21 is an effective agonist for muscarinic-based DREADDs *in vitro* and *in vivo*. ACS Pharmacol. Transl. Sci. 2018. 1(1). 61-72.



外观:	
分子量:	351.28
CAS编号:	2250025-92-2
分子式:	$C_{17}H_{18}N_4$
IUPAC名称:	11-(1-piperazinyl)-5H-dibenzo[b,e][1,4]diazepine dihydrochloride
溶解度:	
质量控制:	
储存条件:	
法律声明:	本产品仅供研究目的提供和销售。 本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试，且未经明示或暗示授权用于其他任何用途，包括但不限于体外诊断、人类或动物用途，以及商业用途 。