Product Data Sheet

Product Name: KRN2
Cat. No.: GC31779

Chemical Properties

Cas. No.	248260-75-5		
SMILES	COC1=C(OC)C2=C[N+]3=C(C(C(CC3)=C4)=CC5=C4OCO5)C(CC6=CC=CC=C6F)=C2C=C1.[Cl-]		
Formula	$C_{27}H_{23}ClFNO_4$	M.Wt	479.93
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	KRN2		

Background

KRN2 is a selective inhibitor of nuclear factor of activated T cells (NFAT5), with an IC50 of 0.1 μM.

KRN2 shows much stronger inhibition of NFAT5-dependent reporter activity in RAW 264.7 macrophages than does BBR; the IC50 value is 0.1 μM for KRN2 and 4 μM for BBR. In parallel, 0.5 μM of KRN2 significantly suppresses the LPS-stimulated increase in NFAT5 protein expression in RAW 264.7 macrophages. It is confirmed that LPS-induced NFAT5 mRNA and protein expression is nearly completely blocked by KRN2. Similarly, KRN2 inhibits the translocation of NFAT5 into the nucleus of RAW264.7 cells stimulated with LPS. KRN2 specifically represses LPS-induced NFAT5 promoter activity, whereas it fails to reduce high salt-induced NFAT5 activity in the same cells, which is consistent with the selective inhibition of TLR4-activated NFAT5, but not hypertonicity-induced NFAT5, by KRN2[1].

[1]. Han EJ, et al. Suppression of NFAT5-mediated Inflammation and Chronic Arthritis by Novel κB-binding Inhibitors. EBioMedicine. 2017 Apr;18:261-273.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA