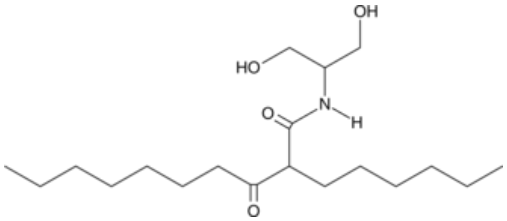
Product Data Sheet

Product Name: K6PC-5
Cat. No.: GC49155

Chemical Properties

Cas. No.	756875-51-1		
SMILES	O=C(C(CCCCCC)C(CCCCCCC)=O)NC(CO)CO		
Formula	C19H37NO4	M.Wt	343.5
Solubility	DMSO: 30 mg/ml	Storage	-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



Background

K6PC-5 is a sphingosine kinase 1 (SPHK1) activator. [1,2,3] It activates SPHK1 in F9-12 teratocarcinoma cell lysates and isolated murine blood in a concentration-dependent manner.[1] K6PC-5 (25 and 50 µM) induces calcium oscillations in HaCaT keratinocytes. It inhibits cell death induced by oxygen-glucose deprivation/reoxygenation in SH-SY5Y neuroblastoma cells when used at a concentration of 10 µM.[2] Topical administration of K6PC-5 (1%) increases stratum corneum integrity and corneodesmosome density in a mouse model of photoaging induced by long-term exposure to ultraviolet A (UVA) and UVB radiation.[3]

1.Hong, J.H., Youm, J.K., Kwon, M.J., et al.K6PC-5, a direct activator of sphingosine kinase 1, promotes epidermal differentiation through intracellular Ca2+ signalingJ. Invest. Dermatol.1282166-2178(2008) 2.Liu, H., Zhang, Z., Xu, M., et al.K6PC-5 activates SphK1-Nrf2 signaling to protect neuronal cells from oxygen glucose deprivation/re-oxygenationCell Physiol. Biochem.51(4)1908-

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1920(2018) 3.Park, H.-y., Youm, J.-K., Kwon, M.J., et al.K6PC-5, a novel sphingosine kinase activator, improves long-term ultraviolet light-exposed aged murine skinExp. Dermatol.17(1)829-836(2008)