H 89 2HCl

货号： H9160

储存条件： 粉末-20°C 可保存 3 年；液体-80°C 可保存 12 月。

产品描述

PKA is a ubiquitous cellular kinase, also known as cAMP-dependent protein kinase, and it is well-established that plays an important role in regulating several functions of cell processes, including regulation of glycogen, sugar, and lipid metabolism. H-89 2HCl, as a newly synthesized isoquinolinesulfonamide, is a ATP-competitive, potent inhibitor of protein kinase A (PKA)(IC50 = 48 nM), and has weak inhibition on several other kinases with IC50 of 80, 120, 135, 270, 2600 and 2800 nM for S6K1, MSK1, PKA, ROCKII, PKBα and MAPKAP-K1b, respectively. H-89 2HCl has since been used extensively for evaluation of the role of PKA in the heart, osteoblasts, hepatocytes, smooth muscle cells, neuronal tissue, epithelial cells, etc. PC12D cells pretreatment with H-89 2HCl led to a dose-dependent inhibition of the forskolin-induced neurite outgrowth and protein phosphorylation. In vivo experimental method, in skinned EDL fibres of the rat, H-89 2HCl with 1-2 μM significantly slowed the repriming rate in rat skinned fibres. Moreover, rat brain ventricles following an injection with the PKA antagonist, H-89 2HCl, the body temperature is increased further due to the inhibition of TRPV1 phosphorylation.

作用机制

H-89 2HCl inhibit the significant modulator role of the cAMP-PKA intracellular signaling pathway mainly acting as a selective and potent inhibitor of protein kinase A (PKA).

产品信息

CAS 号	130964-39-5	
分子式	C20H22BrCl2N3O2S	
分子量	519.28	
溶解度	DMSO	195.0 mg/mL(375.5 mM)
	Water	insoluble