
ID-8

产品编号: D50775

CAS: 147591-46-6

分子式: C₁₆H₁₄N₂O₄

纯度: ≥98%

InChi: InChi=1S/C₁₆H₁₄N₂O₄/c1-10-16(18(20)21)14-8-5-12(19)9-15(14)17(10)11-3-6-13(22-2)7-4-11/h3-9,19H,1-2H3

InChi Key: VVZNWYXIOADGSW-UHFFFAOYSA-N

Smiles: CC1=C(C2=CC=C(O)C=C2N1C1C=CC(=CC=1)OC)[N+]([O-])=O

外观: 固体粉末

作用通路: DYRK

溶解性: DMSO up to 100 mM

保存条件: Store in dry, dark place for one year.

产品介绍: ID-8 is a highly potent and selective small molecule inhibitor of dual-specificity tyrosine phosphorylation-regulated kinase (DYRK). It could support Wnt-induced human embryonic stem cell proliferation and survival without differentiation. Using ID-8, a novel and simple chemically defined xeno-free culture system was developed that allows for long-term expansion of human pluripotent stem cells without FGF or TGF-beta pathway activation. These culture conditions do not include xenobiotic supplements, serum, serum replacement, or albumin. Using this culture system, several human pluripotent cell lines maintained pluripotency (>20 passages) and a normal karyotype and still retained the ability to differentiate into derivatives of all three germ layers. This Wnt-dependent culture system should provide a platform for complete replacement of growth factors with chemical compounds.