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DATASHEET

STO-609 acetate

Product overview

Name	STO-609 acetate
Cat No	HB0593
Biological action	Inhibitor
Purity	>97%
Customer comments	*Cheap and quick delivery.* **Verified customer, Seoul National University**
Description	Selective, competitive CaM-KK inhibitor

Images

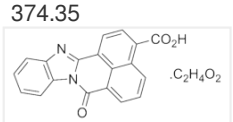
Biological Data

Biological description	Selective, competitive, cell permeable CaM-KK (K_i values are 80 and 15 ng/ml for CaM-KKα and CaM-KKβ respectively). Shows selectivity for CaM-KK without any significant effect on downstream CaM kinases (CaM-KI and -IV).

Solubility & Handling

Storage instructions	Room temperature (desiccate)
Solubility overview	Soluble in NaOH(aq) (45mM) or DMSO (10mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	7-Oxo-7*H*-benzimidazo[2,1-*a*]benz[de]isoquinoline-3-carboxylic acid acetate
Molecular Weight	374.35
Chemical structure	
Molecular Formula	$C_{19}H_{10}N_2O_3.C_2H_4O_2$
CAS Number	1173022-21-3
PubChem identifier	16760660

SMILES	CC(=O)O.C1=CC=C2C(=C1)N=C3N2C(=O)C4=CC=CC5=C(C=CC3=C54)C(=O)O
Source	Synthetic
InChi	InChI=1S/C19H10N2O3.C2H4O2/c22-18-13-5-3-4-10-11(19(23)24)8-9-12(16(10)13)17-20-14-6-1-2-7-15(14)21(17)18;1-2(3)4/h1-9H,(H,23,24);1H3,(H,3,4)
InChiKey	WNRSTFUVBWNELX-UHFFFAOYSA-N
MDL number	MFCD06411456
Appearance	Yellow solid

References

STO-609, a specific inhibitor of the Ca(2+)/calmodulin-dependent protein kinase kinase.

Tokumitsu H *et al* (2002) J Biol Chem 277(18)
PubMedID 11867640

Activation of the aryl hydrocarbon receptor by the calcium/calmodulin-dependent protein kinase kinase inhibitor 7-oxo-7H-benzimidazo[2,1-a]benz[de]isoquinoline-3-carboxylic acid (STO-609).

Monteiro P *et al* (2008) Drug Metab Dispos 36(12)
PubMedID 18755850

Inhibition of Ca^{2+}/calmodulin-dependent protein kinase kinase 2 stimulates osteoblast formation and inhibits osteoclast differentiation.

Cary RL *et al* (2013) J Bone Miner Res 28(7)
PubMedID 23408651