



H-7

1-(5-Isoquinolinesulfonyl)-2-methylpiperazine·2HCl

PRODUCT ANALYSIS SHEET

Catalog Number:	PHZ1104
Lot Number:	See product label
Quantity:	10 mg
Appearance:	White solid
Molecular Formula:	C ₁₄ H ₁₇ N ₃ O ₂ ·2HCl
Molecular Weight:	364.4
Purity:	98%, as assessed by TLC
Summary:	H-7 is a cell permeable compound that inhibits PKA, PKG, MLCK, and PKC.
Biological Activity:	PKA: K _i = 3 μM MLCK: K _i = 97 μM PKG: K _i = 5.8 μM PKC: K _i = 6 μM
Solubility:	Soluble in water at a concentration of 50 mg/mL.
Sterility:	This product is not sterile.
Storage:	Store, as supplied, at 2-8°C. Upon solubilization, apportion into working aliquots and store at -20°C. Avoid repeated freeze/thaw cycles. Solutions are stable at -20°C for up to three months.
Expiration Date:	Expires one year from date of receipt when stored as instructed.
Related Products:	ERK1&2 [pTpY ^{185/187}] antibody, Cat. # 44-680G Tau [pS ²¹⁴] antibody, Cat. # 44-742G Akt/PKB [pS ⁴⁷³] antibody, Cat. # 44-622G Tau [pS ²⁶²] antibody, Cat. # 44-750G PKCδ [pY ³¹¹] (mouse) antibody, Cat. # 44-950 Tau [pS ³⁵⁶] antibody, Cat. # 44-751G Tau [pT ²¹²] antibody, Cat. # 44-740G Tau [pS ⁴⁰⁹] antibody, Cat. # 44-760
References:	Hidaka H., et al. (1984) Isoquinolinesulfonamides, novel and potent inhibitors of cyclic nucleotide dependent protein kinase and protein kinase C. <i>Biochemistry</i> 23(21):5036-5041. Kumar, A., et al. (2002) Distinct signaling pathways are activated in response to mechanical stress applied axially and transversely to skeletal muscle fibers. <i>J. Biol. Chem.</i> 277(48):46493-46503. Wan, X., et al. (2002) PTEN augments staurosporine-induced apoptosis in PTEN-null Ishikawa cells by downregulating PI3K/Akt signaling pathway. <i>Cell Death Differ.</i> 9(4):414-420. Lopez, E. and I. Ferrer (2000) Staurosporine- and H-7-induced cell death in SH-SY5Y neuroblastoma cells is associated with caspase-2 and caspase-3 activation, but not with activation of the FAS/FAS-L-caspase-8 signaling pathway. <i>Brain Res. Mol. Brain Res.</i> 85(1-2):61-67.
Caution:	Avoid contact with eyes, skin, and mucous membranes. Wear protective clothing when handling this product. Not for human use.

This product is for research use only. Not for use in diagnostic procedures.

www.invitrogen.com

Manufactured under ISO 13485 Quality Standard

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI PHZ1104

(Rev 1.2) (DCC-08-1232)

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

