

Product Name	: KN-62
Synonyms	: KN 62;KN62
Cat No.	: M11138
CAS Number	: 127191-97-3
Molecular Formula	: C ₃₈ H ₃₅ N ₅ O ₆ S ₂
Formula Weight	: 721.90
Chemical Name	: 5-Isoquinolinesulfonic acid, 4-[(2S)-2-[(5-isoquinolinylsulfonyl)methylamino]-3-oxo-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester
Description	KN-62 is a specific inhibitor of Ca²⁺/calmodulin-dependent protein kinase II (CaMK II) with K_i of 900 nM for rat brain CaMK II; potently antagonizes ATP-stimulated Ba²⁺ influx into fura-2 loaded human lymphocytes with IC₅₀ of 12.7 nM, inhibits ATP-stimulated ethidium⁺ uptake with IC₅₀ of 13.1 nM; causes hypertension and tachycardia in rats, associated with the diminished rate of GABA release in cerebrospinal fluid.
Pathway	: Endocrinology/Hormones
Target	: CaMK
Receptor	: CaMK V ;CaMKII
Solubility	: 10 mM in DMSO
SMILES	: <chem>CN(C(C1=CC=C(C=C1)OS(=O)(=O)C2=CC=CC=C2C3=CC=CC=C3)C(=O)N4CCN(CC4)C5=CC=CC=C5)S(=O)(=O)C6=CC=CC=C7=C6C=CN=C7</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Tokumitsu H, et al. J Biol Chem. 1990 Mar 15;265(8):4315-20. 2. Ishikawa N, et al. J Pharmacol Exp Ther. 1990 Aug;254(2):598-602. 3. Ito I, et al. Neurosci Lett. 1991 Jan 2;121(1-2):119-21. 4. Gargett CE, et al. Br J Pharmacol. 1997 Apr;120(8):1483-90.

