KN-62
Item No. 13318

CAS Registry No.: 127191-97-3
Formal Name: 4-[(2S)-2-[(5-isoquinolinylsulfonyl)methylamino]-3-oxo-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester, 5-isoquinolinesulfonic acid

MF: C₃₈H₃₅N₅O₆S₂
FW: 721.9
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that KN-62 be stored as supplied at -20°C. It should be stable for at least two years. KN-62 is supplied as a crystalline solid. A stock solution may be made by dissolving the KN-62 in an organic solvent purged with an inert gas. KN-62 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of KN-62 is approximately 1 mg/ml in ethanol and approximately 30 mg/ml in DMSO and DMF. KN-62 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, KN-62 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. KN-62 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF-PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

KN-62 is a selective, cell permeable inhibitor of Ca²⁺/calmodulin-dependent kinase type II (CaMKII; IC₅₀ = 900 nM). It does not affect the activity of several other kinases when tested at 10 μM. KN-62 also acts as a non-competitive antagonist of the purinergic receptor P2RX7 (IC₅₀ = 15 nM).

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/13318

WARNING: This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.