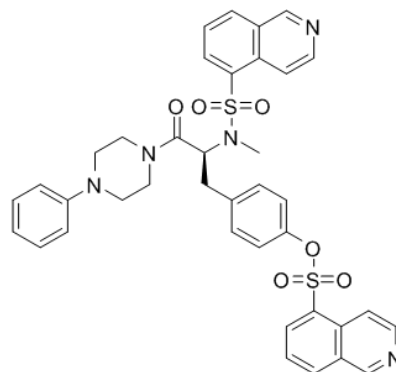


**Product Name** : KN-62  
**Cat. No.** : PC-43468  
**CAS No.** : 127191-97-3  
**Molecular Formula** : C<sub>38</sub>H<sub>35</sub>N<sub>5</sub>O<sub>6</sub>S<sub>2</sub>  
**Molecular Weight** :  
**Target** : CaMK  
**Solubility** : 10 mM in DMSO



## Biological Activity

KN-62 (KN62) is a specific inhibitor of Ca<sup>2+</sup>/calmodulin-dependent protein kinase II (**CaMK II**) with K<sub>i</sub> of 900 nM for rat brain CaMK II, also is a potent, noncompetitive antagonist of **P2X7** receptor with IC<sub>50</sub> of 15 nM in HEK293 cells. KN-62 potently antagonizes ATP-stimulated Ba<sup>2+</sup> influx into fura-2 loaded human lymphocytes with IC<sub>50</sub> of 12.7 nM, inhibits ATP-stimulated ethidium<sup>+</sup> uptake with IC<sub>50</sub> of 13.1 nM. KN-62 causes hypertension and tachycardia in rats, associated with the diminished rate of GABA release in cerebrospinal fluid.

## References

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

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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