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**Data Sheet** 

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Product Name	:	NS 11021
Cat. No.	:	PC-73206
CAS No.	:	956014-19-0
Molecular Formula	:	C <sub>16</sub> H <sub>9</sub> BrF <sub>6</sub> N <sub>6</sub> S
Molecular Weight	:	511.2
Target	:	Potassium Channel
Solubility	:	10 mM in DMSO

## **Biological Activity**

NS11021 is a potent and specific activator of large-conductance Ca2+-activated potassium channels (BKCa/KCa1.1). NS11021 activates KCa1.1 in a concentration-dependent manner by parallelshifting the channel activation curves to more negative potentials at >0.3 uM.

NS11021 increased the open probability of the channel by altering gating kinetics without affecting the single-channel conductance.

NS11021 influenced neither a number of cloned Kv channels nor endogenous Na(+) and Ca(2+) channels (L- and T-type) in guinea pig cardiac myocytes.

NS11021 displayed better specificity and a 10 times higher potency compared with the most broadly applied KCa1.1 opener, NS1619.

NS11021 leads to relaxation of both intracavernous arteries and corpus cavernosum strips primarily through opening of BK(Ca) channels.

## References

Bentzen BH, et al. Mol Pharmacol. 2007 Oct;72(4):1033-44.

Kun A, et al. Br J Pharmacol. 2009 Nov;158(6):1465-76.

Layne JJ, et al. Am J Physiol Regul Integr Comp Physiol. 2010 Feb;298(2):R378-84.

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

E-mail: tech@probechem.com