

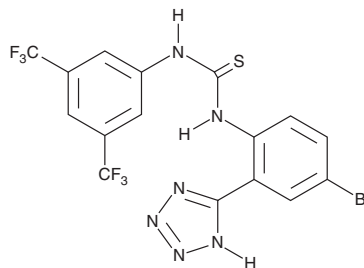
# PRODUCT INFORMATION



## NS 11021

Item No. 15347

**CAS Registry No.:** 956014-19-0  
**Formal Name:** N'-[3,5-bis(trifluoromethyl)phenyl]-N-[4-bromo-2-(2H-tetrazol-5-yl)phenyl]-thiourea  
**MF:** C<sub>16</sub>H<sub>9</sub>BrF<sub>6</sub>N<sub>6</sub>S  
**FW:** 511.2  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 243, 288 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

NS 11021 is supplied as a crystalline solid. A stock solution may be made by dissolving the NS 11021 in the solvent of choice. NS 11021 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of NS 11021 in these solvents is approximately 0.3, 10, and 15 mg/ml, respectively.

NS 11021 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NS 11021 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. NS 11021 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

NS 11021 is an activator of large-conductance Ca<sup>2+</sup>-activated potassium channels (BK<sub>Ca</sub>/K<sub>Ca</sub>1.1).<sup>1</sup> It is selective for BK<sub>Ca</sub> and is thought to bind directly the α subunit.<sup>1</sup> NS 11021 has been shown to relax intracavernous arterial rings and corpus cavernosum strips *in vitro* and to enhance erectile responses in intact rats.<sup>2</sup>

### References

1. Bentzen, B. H., Nardi, A., Calloe, K. *et al.* The small molecule NS11021 is a potent and specific activator of Ca<sup>2+</sup>-activated big-conductance K<sup>+</sup> channels. *Mol. Pharmacol.* **72(4)**, 1033-1044 (2007).
2. Kun, A., Matchkov, V. V., Stankevicius, E., *et al.* NS11021, a novel opener of large-conductance Ca(2+)-activated K(+) channels, enhances erectile responses in rats. *Br. J. Pharmacol.* **158(6)**, 1465-1476 (2009).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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