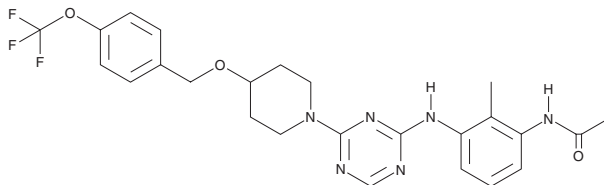


# PRODUCT INFORMATION



## Na<sub>v</sub>1.7 Blocker 52 Item No. 34477

**CAS Registry No.:** 1211866-85-1  
**Formal Name:** N-[2-methyl-3-[[4-[4-[[4-(trifluoromethoxy)phenyl]methoxy]-1-piperidinyl]-1,3,5-triazin-2-yl]amino]phenyl]-acetamide  
**Synonyms:** TC-N 1752, Voltage-gated Sodium Channel 1.7  
**MF:** C<sub>25</sub>H<sub>27</sub>F<sub>3</sub>N<sub>6</sub>O<sub>3</sub>  
**FW:** 516.5  
**Purity:** ≥98%  
**Supplied as:** A 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

Na<sub>v</sub>1.7 blocker 52 is supplied as a solid. A stock solution may be made by dissolving the Na<sub>v</sub>1.7 blocker 52 in the solvent of choice, which should be purged with an inert gas. Na<sub>v</sub>1.7 blocker 52 is soluble in the organic solvent DMSO at a concentration of approximately 30 mg/ml.

### Description

Na<sub>v</sub>1.7 blocker 52 is an inhibitor of voltage-gated sodium channel 1.7 (Na<sub>v</sub>1.7; IC<sub>50</sub> = 0.17 μM).<sup>1</sup> It is selective for Na<sub>v</sub>1.7 over human-ether-a-go-go (hERG), also known as K<sub>v</sub>11.1, Na<sub>v</sub>1.5, and Na<sub>v</sub>1.8 (IC<sub>50</sub>s = >10, 1.1, and 2.2 μM, respectively) but does inhibit Na<sub>v</sub>1.3 and Na<sub>v</sub>1.4 (IC<sub>50</sub>s = 0.3 and 0.4 μM, respectively). Na<sub>v</sub>1.7 blocker 52 (20 and 30 mg/kg) inhibits formalin-induced flinching in a rat model of persistent pain. It also increases the latency to paw withdrawal in a hot plate test in a mouse model of inflammatory pain induced by complete Freund's adjuvant (CFA).<sup>1</sup>

### References

1. Bregman, H., Berry, L., Buchanan, J.L., *et al.* Identification of a potent, state-dependent inhibitor of Nav1.7 with oral efficacy in the formalin model of persistent pain. *J. Med. Chem.* **54**(13), 4427-4445 (2011).
2. Matson, D.J., Hamamoto, D.T., Bregman, H., *et al.* Inhibition of inactive states of tetrodotoxin-sensitive sodium channels reduces spontaneous firing of C-fiber nociceptors and produces analgesia in formalin and complete Freund's adjuvant models of pain. *PLoS One* **10**(9), e0138140 (2015).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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