

PRODUCT INFORMATION

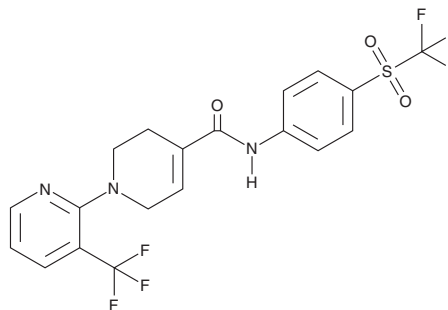


A-784168

Item No. 32855

CAS Registry No.: 824982-41-4
Formal Name: 3,6-dihydro-3'-(trifluoromethyl)-
N-[4-[(trifluoromethyl)sulfonyl]
phenyl]-[1(2H),2'-bipyridine]-4-
carboxamide

MF: C₁₉H₁₅F₆N₃O₃S
FW: 479.4
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

A-784168 is supplied as a solid. A stock solution may be made by dissolving the A-784168 in the solvent of choice, which should be purged with an inert gas. A-784168 is soluble in the organic solvent DMSO at a concentration of approximately 40 mg/ml.

Description

A-784168 is a transient receptor potential vanilloid 1 (TRPV1) competitive antagonist.¹ It inhibits capsaicin-induced activation of TRPV1 in 1321N1 cells expressing TRPV1 (IC₅₀ = 25 nM for the human receptor). A-784168 is selective for TRPV1 over a panel of 74 neurotransmitter receptors, ion channels, and other TRP channels at 50 μM but does act as an antagonist at TRP melastatin 8 (TRPM8; IC₅₀ = 20.8 μM). It also inhibits TRPV1 activation induced by mildly acidic conditions, N-arachidonoyl dopamine (NADA; Item No. 90057), or anandamide (Item No. 90050) in HEK293 cells (IC₅₀s = 14, 33.7, and 35.1 nM, respectively). It inhibits capsaicin-induced currents in primary rat dorsal root ganglion neurons (IC₅₀ = 10 nM). A-784168 (200 μmol/kg) inhibits thermal hypersensitivity and mechanical hypersensitivity induced by NGF in rats.²

References

1. Cui, M., Honore, P., Zhong, C., *et al.* TRPV1 receptors in the CNS play a key role in broad-spectrum analgesia of TRPV1 antagonists. *J. Neurosci.* **26**(37), 9385-9393 (2006).
2. Mills, C.D., Nguyen, T., Tanga, F.Y., *et al.* Characterization of nerve growth factor-induced mechanical and thermal hypersensitivity in rats. *Eur. J. Pain* **17**(4), 469-479 (2012).

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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