

# PRODUCT INFORMATION

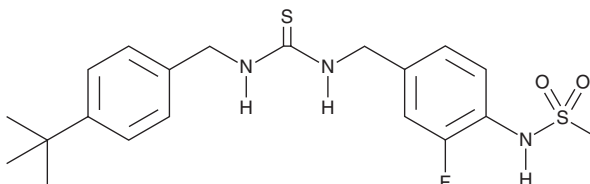


**JYL1421**

Item No. 20458

**CAS Registry No.:** 401907-26-4  
**Formal Name:** N-[4-[[[4-(1,1-dimethylethyl)phenyl]methyl]amino]thioxomethyl]amino]methyl]-2-fluorophenyl]-methanesulfonamide

**MF:** C<sub>20</sub>H<sub>26</sub>FN<sub>3</sub>O<sub>2</sub>S<sub>2</sub>  
**FW:** 423.6  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 225 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

## Laboratory Procedures

JYL1421 is supplied as a crystalline solid. A stock solution may be made by dissolving the JYL1421 in the solvent of choice. JYL1421 is soluble in the organic solvent DMSO, which should be purged with an inert gas.

## Description

JYL1421 is an antagonist of transient receptor potential vanilloid 1 (TRPV1).<sup>1</sup> It inhibits calcium uptake induced by capsaicin (Item Nos. 92350 | 10010743) in CHO cells expressing rat TRPV1 (EC<sub>50</sub> = 9.2 nM). JYL1421 inhibits capsaicin-induced release of the neuropeptides somatostatin, substance P (Item No. 24035), and calcitonin gene-related peptide (CGRP) from isolated rat trachea (IC<sub>50</sub>s = 227-491 nM).<sup>2</sup> It inhibits capsaicin-induced hypothermia and hypotension in rats when administered at doses of 2 and 0.4 mg/kg, respectively. JYL1421 (2 mg/kg) also reduces the number of wiping movements induced by ocular administration of capsaicin in rats. Unlike several other TRPV1 antagonists, JYL1421 does not induce hyperthermia in rats when administered at doses ranging from 1.02 to 32.77 μmol/kg.<sup>3</sup>

## References

1. Wang, Y., Szabo, T., Welter, J.D., *et al.* High affinity antagonists of the vanilloid receptor. *Mol. Pharmacol.* **62(4)**, 947-956 (2002).
2. Jakab, B., Helyes, Z., Varga, A., *et al.* Pharmacological characterization of the TRPV1 receptor antagonist JYL1421 (SC0030) in vitro and in vivo in the rat. *Eur. J. Pharmacol.* **517(1-2)**, 35-44 (2005).
3. Garami, A., Shimansky, Y.P., Pakai, E., *et al.* Contributions of different modes of TRPV1 activation to TRPV1 antagonist-induced hyperthermia. *J. Neurosci.* **30(4)**, 1435-1440 (2010).

### 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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