

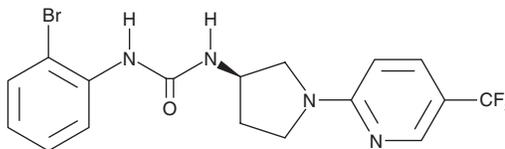
PRODUCT INFORMATION



SB-705498

Item No. 17313

CAS Registry No.: 501951-42-4
Formal Name: N-(2-bromophenyl)-N'-[(3R)-1-[5-(trifluoromethyl)-2-pyridinyl]-3-pyrrolidinyl]-urea
MF: C₁₇H₁₆BrF₃N₄O
FW: 429.2
Purity: ≥98%
UV/Vis.: λ_{max}: 257, 312 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

SB-705498 is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-705498 in the solvent of choice. SB-705498 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of SB-705498 in these solvents is approximately 10, 16, and 20 mg/ml, respectively.

SB-705498 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SB-705498 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SB-705498 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The transient receptor potential vanilloid type 1 (TRPV1) receptor is a nonselective cation channel gated by noxious heat, protons, and capsaicin (Item No. 92350). SB-705498 is an orally bioavailable, competitive antagonist of the capsaicin-mediated activation of TRPV1 receptors (pK_is = 7.6, 7.5, and 7.3 for human, rat, and guinea pig, respectively).¹ It has been shown to induce rapid, reversible inhibition of capsaicin (IC₅₀ = 3 nM)-, acid (pH 5.3)-, or heat (50°C; IC₅₀ = 6 nM)-mediated activation of human TRPV1 (at -70 mV).¹

Reference

1. Gunthorpe, M.J., Hannan, S.L., Smart, D., *et al.* Characterization of SB-705498, a potent and selective vanilloid receptor-1 (VR1/TRPV1) antagonist that inhibits the capsaicin-, acid-, and heat-mediated activation of the receptor. *J. Pharmacol. Exp. Ther.* **321(3)**, 1183-1192 (2007).

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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