PRODUCT INFORMATION



TFAP

Item No. 26745

CAS Registry No.: 1011244-68-0

Formal Name: N-(5-amino-2-pyridinyl)-4-

(trifluoromethyl)-benzamide

MF: $C_{13}H_{10}F_3N_3O$

FW: 281.2 **Purity:** ≥98%

 λ_{max} : 223, 317 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 vears

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

Laboratory Procedures

TFAP is supplied as a crystalline solid. A stock solution may be made by dissolving the TFAP in the solvent of choice, which should be purged with an inert gas. TFAP is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of TFAP in DMF is approximately 5 mg/ml and approximately 10 mg/ml in DMSO and ethanol.

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

Description

TFAP is an inhibitor of COX-1 (IC₅₀ = 0.8 μ M).¹ It is selective for COX-1 over COX-2 (IC₅₀ = 210 μ M). TFAP (10 and 30 mg/kg) reduces acetic acid-induced writhing in mice and has analgesic activity in the formalin test in rats when administered at a dose of 30 mg/kg. It does not induce gastric damage in rats when administered at doses up to 300 mg/kg.

Reference

1. Kakuta, H., Zheng, X., Oda, H., et al. Cyclooxygenase-1-selective inhibitors are attractive candidates for analgesics that do not cause gastric damage. Design and in vitro/in vivo evaluation of a benzamide-type cyclooxygenase-1 selective inhibitor. J. Med. Chem. 51(9), 2400-2411 (2008).

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

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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