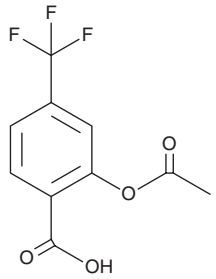
PRODUCT INFORMATION

Triflusal

Item No. 30274

CAS Registry No.:	322-79-2
Formal Name:	2-(acetyloxy)-4-(trifluoromethyl)-benzoic acid
Synonym:	UR 1501
MF:	$C_{10}H_7F_3O_4$
FW:	248.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 224 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

Triflusal is supplied as a crystalline solid. A stock solution may be made by dissolving the triflusal in the solvent of choice, which should be purged with an inert gas. Triflusal is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of triflusal in these solvents is approximately 30 mg/ml.

Description

Triflusal is an inhibitor of platelet aggregation (IC_{50}s = 48.3 and 693 µM in isolated human whole blood and platelet-rich plasma, respectively).[1] It inhibits production of thromboxane B_2 (TXB_2; Item No. 19030) and 6-keto prostaglandin $F_{1\alpha}$ (6-keto $PGF_{1\alpha}$; Item No. 15210) induced by arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) with IC_{50} values of 468 and 339 µM, respectively, in isolated human whole blood. Triflusal decreases IgG-ovalbumin immune complex-induced NF-κB nuclear translocation and production of nitric oxide (NO) in isolated rat peritoneal macrophages when used at a concentration of 1,000 µM.[2] Oral administration of triflusal (30 mg/kg) reduces infarct volume and peri-infarct levels of OX-6, a marker of activated microglia, in a rat model of focal ischemia induced by permanent middle cerebral artery occlusion (MCAO).[3] It also reduces increases in cortical amyloid-β precursor protein (APP) levels induced by intracerebroventricular administration of amyloid-β (25-35) in rats at the same dose.[4]

References

1. de la Cruz, J.P., Mata, J.M., and de la Cuesta, F.S. Triflusal vs aspirin on the inhibition of human platelet and vascular cyclooxygenase. *Gen. Pharmacol.* **23(2)**, 297-300 (1992).
2. Bayón, Y., Alonso, A., and Crespo, M.S. 4-trifluoromethyl derivatives of salicylate, triflusal and its main metabolite 2-hydroxy-4-trifluoromethylbenzoic acid, are potent inhibitors of nuclear factor κB activation. *Br. J. Pharmacol.* **126(6)**, 1359-1366 (1999).
3. Whitehead, S.N., Bayona, N.A., Cheng, G., *et al*. Effects of triflusal and aspirin in a rat model of cerebral ischemia. *Stroke* **38(2)**, 381-387 (2007).
4. Whitehead, S., Cheng, G., Hachinski, V., *et al*. Interaction between a rat model of cerebral ischemia and β-amyloid toxicity. II. Effects of triflusal. *Stroke* **36(8)**, 1782-1789 (2005).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM