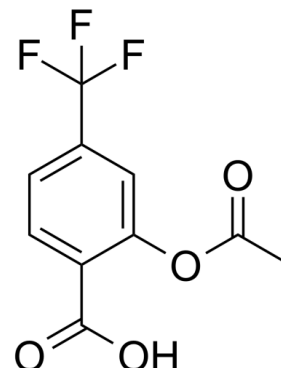


Data Sheet

Product Name:	Triflusal
Cat. No.:	CS-2755
CAS No.:	322-79-2
Molecular Formula:	C ₁₀ H ₇ F ₃ O ₄
Molecular Weight:	248.16
Target:	COX
Pathway:	Immunology/Inflammation
Solubility:	DMSO : 100 mg/mL (402.97 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Triflusal irreversibly inhibits the production of thromboxane-B₂ in platelets by acetylating cyclooxygenase-1. Target: COX Triflusal at 10 mM, 100 mM and 1 M decreases LDH efflux in rat brain slices after anoxia/reoxygenation by 24%, 35% and 49% respectively. Triflusal also reduces inducible NO synthase activity by 18%, 21% and 30% [1]. Triflusal (10 mg/kg i.v.) reduces platelet deposition on subendothelium-induced primary thrombus by about 68% in rabbits. Triflusal (10 mg/kg i.v.) reduces platelet deposition on a fresh thrombus formed over tunica media by about 48% in rabbits. Triflusal (40 mg/kg p.o.) reduces platelet deposition on a primary thrombus triggered by subendothelium and tunica media by 53% in rabbits. Triflusal (40 mg/kg p.o.) significantly reduces Cox-2 mRNA levels and protein levels without influence Cox-1 mRNA levels on the vascular wall in rabbits [2]. Triflusal (600 mg/day for 5 days) results in an increase in NO production by neutrophils and an increase in endothelial nitric oxide synthase (eNOS) protein expression in neutrophils in healthy volunteers [3].

References:

- [1]. Fernández de Arriba A, et al. Inhibition of cyclooxygenase-2 expression by 4-trifluoromethyl derivatives of salicylate, triflusal, and its deacetylated metabolite, 2-hydroxy-4-trifluoromethylbenzoic acid. *Mol Pharmacol*. 1999 Apr;55(4):753-60.
- [2]. Duran, X., et al., Protective effects of triflusal on secondary thrombus growth and vascular cyclooxygenase-2. *J Thromb Haemost*, 2008. 6(8): p. 1385-92.
- [3]. De Miguel, L.S., et al., A 4-trifluoromethyl derivative of salicylate, triflusal, stimulates nitric oxide production by human neutrophils: role in platelet function. *Eur J Clin Invest*, 2000. 30(9): p. 811-7.

CAIndexNames:

Benzoic acid, 2-(acetyloxy)-4-(trifluoromethyl)-

SMILES:

O=C(O)C1=CC=C(C(F)(F)F)C=C1OC(=O)C

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA