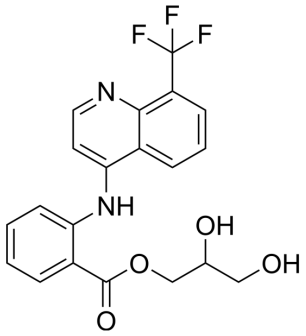
Floctafenine

Cat. No.:	HY-A0259
CAS No.:	23779-99-9
Molecular Formula:	$C_{20}H_{17}F_3N_2O_4$
Molecular Weight:	406.36
Target:	COX
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Floctafenine, a nonsteroidal anti-inflammatory agent (NSAID), acts as an effective analgesic agent[1][2]. Floctafenine is an inhibitor of COX-1 and COX-2 activities in vitro,showing a slightly higher potency towards COX-I. Floctafenine is used for the research of short term pain research[3].	
IC_{50} & Target	COX-1	COX-2
In Vitro	Floctafenine (0.1-100 μM; in the presence of LPS; 24 hours) is slightly more potent 1.5-fold to inhibit in vitro platelet COX-I than monocyte COX-2. The IC_{50} values for platelet COX-I and monocyte COX-2 inhibition are 2.33 μM (95%CI) and 3.47 μM (95%CI), respectively in heparinized whole blood samples[3]. Floctafenine (0.1-100 μM; in the presence of A23187; 1 hour) does not significantly affect A23187-caused LTB4 generation even up to 100 μM[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Floctafenine (intraperitoneal injection; 50 mg/kg; single dose; 30 minutes prior to p-benzoquinone) has an inhibitory effects on p-benoquinone-induced writhing in rats, inhibition of writhing is 65.98%[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. P Giuseppe, et al. Floctafenine: a valid alternative in patients with adverse reactions to nonsteroidal anti-inflammatory drugs. Ann Allergy Asthma Immunol. 1997 Jan;78(1):74-8.

[2]. Gehan Hegazy Hegazy, et al. Synthesis of some floctafenine derivatives of expected anti-inflammatory/analgesic activity. Arch Pharm (Weinheim). 2005 Aug;338(8):378-84.

[3]. R Maenthaisong, et al. Clinical pharmacology of cyclooxygenase inhibition and pharmacodynamic interaction with aspirin by floctafenine in Thai healthy subjects.Int J Immunopathol Pharmacol. Apr-Jun 2013;26(2):403-17.

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

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