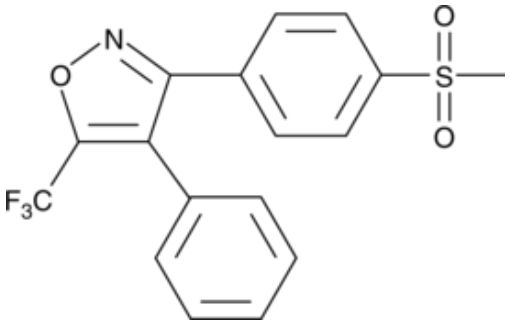
Product Data Sheet

Product Name: CAY10404
Cat. No.: GC43149

Chemical Properties

Cas. No.	340267-36-9		
Chemical Name	3-[4-(methylsulfonyl)phenyl]-4-phenyl-5-(trifluoromethyl)-isoxazole		
SMILES	FC(F)(F)c1onc(c2ccc(cc2)S(=O)(=O)C)c1c1ccccc1		
Formula	$C_{17}H_{12}F_3NO_3S$	M.Wt	367.4
Solubility	17mg/mL in ethanol or DMSO, 21mg/mL in DMF	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Many non-steroidal anti-inflammatory drugs (NSAIDs) are potent but non-selective inhibitors of both COX-1 and COX-2 in humans.[1] CAY10404 is one of the most selective inhibitors of COX-2 which has been reported to date, with a selectivity index (SI; SI = IC50 COX-1/IC50 COX-2) of >500,000. (The COX-1 IC50 is >500 mM, and COX-2 IC50 is <1 nM.)[2] As a reference point, the SI of celecoxib is about 400. Thus, CAY10404 has an SI which is several logs greater than the first generation of selective COX-2 inhibitors, and is comparable to the SI of second generation selective COX-2 inhibitors, such as valdecoxib and etoricoxib.[3]

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Reference:

[1.] Barnett, J., Chow, J., Ives, D., et al. Purification, characterization and selective inhibition of human prostaglandin G/H synthase 1 and 2 expressed in the baculovirus system. Biochim Biophys. Acta. 1209(1), 130-139 (1994).

[2]. Habeeb, A.G., Rao, P.N.P., and Knaus, E.E. Design and syntheses of diarylisoxazoles: Novel inhibitors of cyclooxygenase-2 (COX-2) with analgesic-antiinflammatory activity. Drug Development Research 51, 273-286 (2000).

[3]. Mardini, I.A., and Fitzgerald, G.A. Selective inhibitors of cyclooxygenase-2: A growing class of anti-inflammatory drugs. Molecular Interventions 1(1), 30-38 (2001).

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA