Product Data Sheet

Product Name: AL 8810 isopropyl ester
Cat. No.: GC16566

Chemical Properties

Cas. No.	208114-93-6		
Chemical Name	9α,15R-dihydroxy-11β-fluoro-15-(2,3-dihydro-1H-inden-2-yl)-16,17,18,19,20-pentanor-prosta-5Z,13E-dien-1-oic acid, isopropyl ester		
SMILES	CC(C)OC(CCC/C=C\C[C@@H]1[C@@H](/C=C/[C@H](O)C2CC3=CC=CC=C3C2)[C@@H](F)C[C@@H]1O)=O		
Formula	$C_{27}H_{37}FO_4$	M.Wt	444.6
Solubility	≤25mg/ml in ethanol;25mg/ml in DMSO;25mg/ml in dimethyl formamide	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	AL 8810 isopropyl ester		

Background

EC50: 430 nM

AL 8810 is a a FP receptor antagonist.

Prostaglandin F receptor (FP), a receptor belonging to the prostaglandin (PG) group of receptors, binds to and mediates the biological actions of Prostaglandin F2α (PGF2α).

In vitro: Previous study found that AL-8810 had weak agonist potency in A7r5 cells and 3T3 fibroblasts. AL-8810 exhibited properties of an apparent competitive antagonist, which was demonstrated by producing parallel dextral shifts of the agonist concentration-response curves and no significant suppression of the maximal agonist-induced response. In addition, AL-8810 could dose-dependently antagonize the response to 100 nM fluprostenol in A7r5 cells, but however, AL-8810 could not significantly inhibit

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

functional responses of DP, TP, EP(2), EP(4), receptor subtypes even at 10 μM concentration [1].

In vivo: In a previous study, the effect of acute intraperitoneal post-treatment with AL-8810 was studied in FP receptor knockout (FP-/-) mice after controlled cortical impact (CCI). Results showed that post-treatment with AL-8810 had no significant effect on cortical lesions, suggesting the irreversible effect of primary CCI injury, but significantly reduced hippocampal swelling. In addition, AL-8810 treatment at a dose of 10 mg/kg could significantly improve NDS after CCI, and in the AL-8810 group, CCI-induced decrease in grip strength was three-fold less [2].

Clinical trial: Up to now, AL 8810 is still in the preclinical development stage.

References:
[1] B. W. Griffen, P. Klimko, J. Y. Crider, et al. AL-8810: A novel prostaglandin F2α analog with selective antagonist effects at the prostaglandin F2α (FP) receptor. Journal of Pharmacology and Experimental Therapeutics 290(3), 1278-1284 (1999).
[2] Glushakov AV, Robbins SW, Bracy CL, Narumiya S, Doré S. Prostaglandin F2α FP receptor antagonist improves outcomes after experimental traumatic brain injury. J Neuroinflammation. 2013 Oct 30;10:132. doi: 10.1186/1742-2094-10-132.