

Product Data Sheet

Product Name: Prostaglandin A2

Cat. No.: GC18353

Chemical Properties

Cas. No. 13345-50-1

Chemical Name 9-oxo-15S-hydroxy-prosta-5Z,10,13E-trien-1-oic acid

SMILES O=C1[C@H](C/C=C\CCCC(O)=O)[C@@H](/C=C/[C@@H](O)CCCC)C=C1

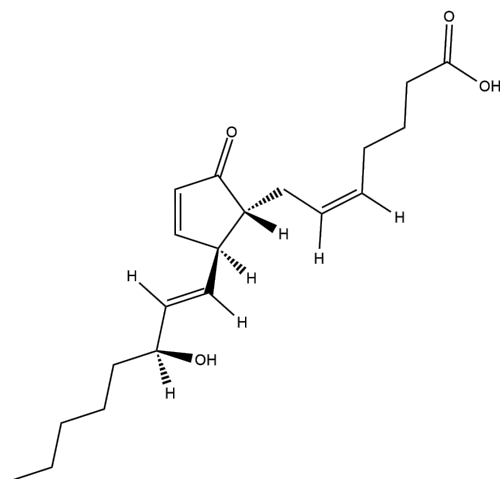
Formula $C_{20}H_{30}O_4$ M.Wt 334.5

Solubility 50mg/mL in DMSO, 100mg/mL in ethanol, 75mg/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

PGA2 is a naturally occurring prostaglandin in gorgonian corals where it may function in self defense. It is generally not present in mammals. PGA2 has low biological potency in most bioassays, but it does show some antiviral/antitumor activity.[1] At a 25 uM concentration, PGA2 blocks the cell cycle progression of NIH 3T3 cells at the G1 and G2/M phase.[2] It has also been shown to act as a

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Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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vasodilator with natriuretic properties.[3]

Reference:

- [1]. Fukushima, M., Kato, T., Narumiya, S., et al. Prostaglandin A and J: Antitumor and antiviral prostaglandins. Adv. Prostaglandin Thromboxane Leukot. Res. 19, 415-418 (1989).
- [2]. Hitomi, M., Shu, J., Strom, D., et al. Prostaglandin A2 blocks the activation of G1 phase cyclin-dependent kinase without altering mitogen-activated protein kinase stimulation. J. Biol. Chem. 271(16), 9376-9383 (1996).
- [3]. Frolich, J.C., Sweetman, B.J., Carr, K., et al. Assessment of the levels of PGA2 in human plasma by gas chromatography-mass spectrometry. Prostaglandins 10(1), 185-195 (1975).

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