PRODUCT INFORMATION



GW 870086

Item No. 40786

CAS Registry No.: 827319-43-7

Formal Name: 6α,9-difluoro-11β-hydroxy-16α-methyl-3-

> $0x0-17\alpha-[[(2,2,3,3-tetramethylcyclopropyl)]$ carbonyl]oxy]-androsta-1,4-diene-17carboxylic acid, cyanomethyl ester

MF: $C_{31}H_{39}F_{2}NO_{6}$

FW: 559.6 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

GW 870086 is supplied as a solid. A stock solution may be made by dissolving the GW 870086 in the solvent of choice, which should be purged with an inert gas. GW 870086 is soluble (≥10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol and methanol.

Description

GW 870086 is a cyano- and isopropyl-substituted derivative of the synthetic corticosteroid and glucocorticoid receptor agonist fluticasone propionate (Item No. 20703). It selectively inhibits TNF- α -induced transcriptional activity of NF- κ B in a reporter assay using A549 cells (IC₅₀ = 0.08 nM) over a panel of 50 steroid receptors in reporter assays using CV-1 cells at 1 μM. GW 870086 (5 nM) prevents TNF-α-induced increases in the expression of mRNA encoding COX-2 and TNF-C, also known as lymphotoxin-β (LT-β), in A549 lung cancer cells. It inhibits TNF-α-induced increases in IL-8 secretion in 16HBE bronchial epithelial cells in a concentration-dependent manner. In vivo, GW 870086 (30 μg/animal) reduces oxazolone-induced increases in ear swelling in a mouse model of contact dermatitis, as well as inhibits ovalbumin-induced bronchoconstriction and increases in the number of eosinophils in the bronchoalveolar lavage fluid (BALF) in mice when administered at doses of 30 or 100 µg/animal per day.

Reference

1. Uings, I.J., Needham, D., Matthews, J., et al. Discovery of GW870086: A potent anti-inflammatory steroid with a unique pharmacological profile. Br. J. Pharmacol. 169(6), 1389-403 (2013).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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