## Product Datasheet

# GW870086

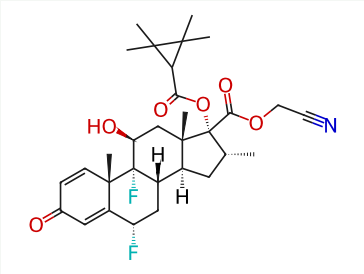
Catalog No. **BP-02087** · CAS **827319-43-7** · Form **free base** · Physical state **other** · Color **white to off-white** · Version **1.0** · Revision **2026-09-14**

**FOR RESEARCH USE ONLY. NOT FOR HUMAN OR VETERINARY USE.**

| Target | Research area |
|---|---|
| **Glucocorticoid Receptor** | **Inflammation/Immunology; Endocrinology** |

| | |
|---|---|
| Molecular formula | $C_{31}H_{39}F_2NO_6$ |
| Molecular weight | **559.6413** |

**STRUCTURE**




## DESCRIPTION

GW-870086 is a potent anti-inflammatory agent, acting as a glucocorticoid receptor agonist, with a pIC50 of 10.1 in A549 cells expressing NF-κB.

## BIOLOGICAL ACTIVITY

In Vitro

GW-870086 a glucocorticoid receptor agonist, inhibits NFkB reporter gene with a pIC50 of 10.1, but shows no effect on the MMTV reporter genes in A549 cells, and has little or no activity at the oestrogen receptor, progesterone receptor, progesterone receptor, mineralocorticoid receptor or androgen receptor. GW-870086 (1 pM-1 μM) dose-dependently inhibits the L-6 release induced by TNF-α in A549 epithelial carcinoma cells and by IL-1 in MG63 osteosarcoma cells (pIC50s, 9.6, 10.2)[1]. GW-870086 (GW870086X; 10-100 nM) significantly increases fibronectin secretion. However, GW-870086 has no effect on MMP2 secretion, and does not increase cellular myocilin.

## SOLUBILITY

Soluble in DMSO

## REFERENCES

[1]. Uings IJ, et al. Discovery of GW870086: a potent anti-inflammatory steroid with a unique pharmacological profile. Br J Pharmacol. 2013 Jul;169(6):1389-403.

[2]. Stamer WD, et al. Unique response profile of trabecular meshwork cells to the novel selective glucocorticoid receptor agonist, GW870086X. Invest Ophthalmol Vis Sci. 2013 Mar 1;54(3):2100-7.