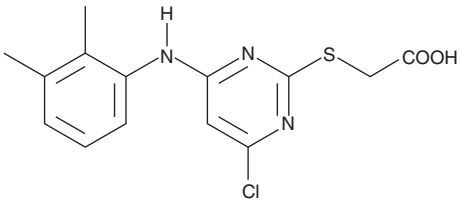
PRODUCT INFORMATION

Wy 14643

Item No. 70730

CAS Registry No.:	50892-23-4
Formal Name:	2-[[4-chloro-6-[(2,3-dimethylphenyl) amino]-2-pyrimidinyl]thio]-acetic acid
Synonyms:	NSC 310038, Pirinixic Acid
MF:	$C_{14}H_{14}ClN_3O_2S$
FW:	323.8
Purity:	≥98%
UV/Vis.:	λ_{max}: 244, 292 nm
Supplied as:	A crystalline 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

Wy 14643 is supplied as a crystalline solid. A stock solution may be made by dissolving the Wy 14643 in the solvent of choice, which should be purged with an inert gas. Wy 14643 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Wy 14643 in ethanol is approximately 16.5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Wy 14643 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of Wy 14643 in PBS (pH 7.2) is approximately 40 µg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Wy 14643 is an agonist of peroxisome proliferator-activated receptor α (PPARα).[1] It selectively transactivates PPARα over PPARγ in a reporter assay using CV-1 mouse fibroblasts when used at a concentration of 100 µM. Wy 14643 (2 mg/kg) decreases distal colon protein levels of IFN-γ, TNF-α, IL-1β, and IL-6 in a mouse model of experimental colitis induced by dextran sulfate sodium (DSS; Item No. 23250).[2] Wy 14643 (0.1% w/w in the diet) reduces hepatic triglycerides, leukocyte recruitment, and fibrosis in a mouse model of methionine- and choline-deficient diet-induced steatohepatitis.[3]

References

1. Lehmann, J.M., Lenhard, J.M., Oliver, B.B., *et al.* Peroxisome proliferator-activated receptors α and γ are activated by indomethacin and other non-steroidal anti-inflammatory drugs. *J. Biol. Chem.* **272(6)**, 3406-3410 (1997).
2. Azuma, Y.-T., Nishiyama, K., Matsuo, Y., *et al.* PPARα contributes to colonic protection in mice with DSS-induced colitis. *Int. Immunopharmacol.* **10(10)**, 1261-1267 (2010).
3. Ip, E., Farrell, G., Hall, P., *et al.* Administration of the potent PPARα agonist, Wy-14,643, reverses nutritional fibrosis and steatohepatitis in mice. *Hepatology* **39(5)**, (2004).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM