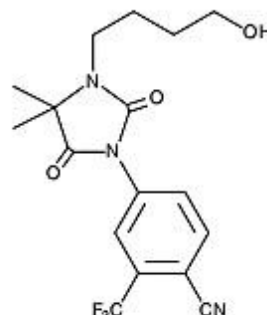


PRODUCT INFORMATION

RU-58841

Item No. 24680

CAS Registry No.: 154992-24-2
 Formal Name: 4-[3-(4-hydroxybutyl)-4,4-dimethyl-2,5-dioxo-1-imidazolidinyl]-2-(trifluoromethyl)-benzonitrile
 MF: $C_{17}H_{18}F_3N_3O_3$
 FW: 369.3
 Purity: $\geq 99\%$
 UV/Vis.: λ_{max} : 262 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

RU-58841 is supplied as a crystalline solid. A stock solution may be made by dissolving the RU-58841 in the solvent of choice, which should be purged with an inert gas. RU-58841 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RU-58841 is approximately 33 mg/ml in ethanol and DMF and approximately 25 mg/ml in DMSO.

RU-58841 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RU-58841 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. RU-58841 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RU-58841 is a non-steroidal antiandrogen that binds to the androgen receptor ($K_d = 1.8, 1.1, 5.6, 1.3$, and 1.4 nM for human, rat, mouse, hamster prostate, and hamster flank organ receptors, respectively).¹ *In vivo*, topical administration of RU-58841 (1-100 μg per animal) reduces size of the flank organ without affecting sex organs in a dose-dependent manner in hamsters. It has no effect on sex organ weight in intact rats when administered percutaneously, subcutaneously, or orally at doses up to 1 mg per animal. RU-58841 (5% v/v) also induces hair regrowth in the bald frontal scalps of postpubertal stump-tailed macaques, a model for male pattern baldness.²

References

1. Battmann, T., Bonfils, A., Branche, C., et al. RU 58841, a new specific topical antiandrogen: A candidate of choice for the treatment of acne, androgenetic alopecia and hirsutism. *J. Steroid Biochem. Mol. Biol.* 48(1), 55-60 (1994).
2. Obana, N., Chang, C., and Uno, H. Inhibition of hair growth by testosterone in the presence of dermal papilla cells from the frontal bald scalp of the postpubertal stump-tailed macaque. *Endocrinology* 138(1), 356-361 (1997).