
Product Data Sheet

Product Name: Acitretin sodium

Cat. No.: GC17113

Chemical Properties

Cas. No. 925701-88-8

Chemical Name sodium (2E,4E,6E,8E)-9-(4-methoxy-2,3,6-trimethylphenyl)-3,7-dimethylnona-2,4,6,8-tetraenoate

SMILES CC(/C([H])=C([H])/C1=C(C=C(OC)C(C)=C1C)C)=C([H])\C([H])=C([H])\C(C)=C([H])\C([O-])=O.[Na+]Formula C₂₁H₂₅NaO₃ M.Wt 348.41

Solubility Soluble in DMSO 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**

Acitretin sodium (Ro 10-1670) is a second-generation, systemic retinoid that has been used in the treatment of psoriasis. Target: RAR/RXR. Acitretin sodium is a second-generation, systemic retinoid that has been approved for the treatment of psoriasis since 1997. It can be considered one of the treatments of choice for pustular and erythrodermic psoriasis. However, the efficacy of acitretin sodium as a monotherapy for plaque psoriasis is less, although it is often used in combination therapy with other systemic psoriasis therapies, especially ultraviolet B or psoralen plus ultraviolet A phototherapy, to increase efficacy. Such combination treatments may potentially minimise toxicity by using lower doses of each of the two agents [1].

Thirty-nine male adult Wistar albino rats were divided into 3 groups as two experimental groups and one control group. The first group consisting 14 rats were applied orally standard dose (0.75 mg/kg/day) acitretin sodium and the second group consisting 16 rats were applied high dose (1.5 mg/kg/day) acitretin sodium. Acitretin sodium was given within dimethyl sulphoxide (DMSO), which was diluted with saline solution as a ratio of 1/10, in order to increase its solubility. The control group consisting 9 rats were given only saline solution including DMSO for 8 weeks. After 8 weeks of the administration, half of the rats in the first and second groups and the entire control group were sacrificed under deep ether anaesthesia and bilateral orchidectomy was made. The remaining rats were compared with the control group using a similar method at the end of 8 weeks of wash-off period. The orchidectomy materials were histopathologically evaluated under the light microscope for spermatogenesis.

Caution: Product has not been fully validated for medical applications. For research use only.

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according to parameters including spermatogenetic activity, spermatogenetic organization, seminiferous tubular diameter, interstitial Leydig cells and fibroblasts. In our study it was concluded that the standard and high doses of acitretin sodium do not have any effect on the spermatogenesis of threats [2]. Clinical indications: Psoriasis FDA Approved Date: Toxicity: nausea; headache; itching; red or flaky skin; dry or red eyes; dry mouth; depression; hair loss

References:

- [1]. Lee CS, et al. A review of acitretin, a systemic retinoid for the treatment of psoriasis. Expert Opin Pharmacother. 2005 Aug;6(10):1725-34.
- [2]. Seng r B, et al. Effects of acitretin on spermatogenesis of rats. J Eur Acad Dermatol Venereol. 2006 Jul;20(6):689-92.

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