

Product Data Sheet

Product Name: Isotretinoin

Cat. No.: GC15382

Chemical Properties

Cas. No. 4759-48-2

Chemical Name (2Z,4E,6E,8E)-3,7-dimethyl-9-(2,6,6-trimethylcyclohexen-1-yl)nona-2,4,6,8-tetraenoic acid

SMILES CC1=C(C(CCC1)(C)C)C=CC(=CC=CC(=CC(=O)O)C)C

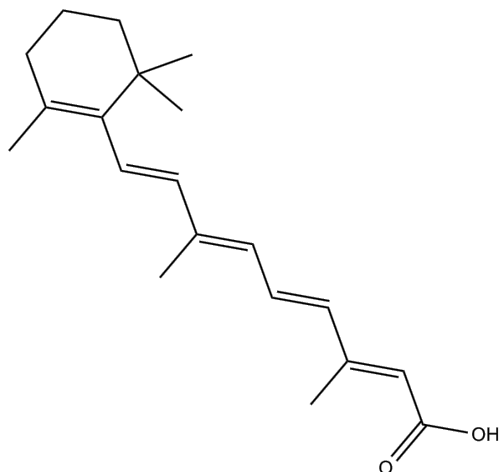
Formula $C_{20}H_{28}O_2$ M.Wt 300.44

Solubility ≥ 13.8 mg/mL in DMSO, ≥ 24.3 mg/mL in EtOH with ultrasonic and warming
Storage -20°C , protect from light, stored under nitrogen. unstable in solution, ready to use.

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

Isotretinoin (13-cis-Retinoic acid) is a medication used for the treatment of severe acne. It was first developed to be used as a chemotherapy medication for the treatment of brain cancer, pancreatic

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

cancer and more. Target: RAR/RXR Isotretinoin has been the most effective and long-lasting drug for the treatment of severe acne for more than 30 years and can achieve long-term remission in 70-80% of patients after a single course. The new evidence-based European S3-guideline recommends the use of Isotretinoin as a first-line medication for the treatment of severe papulopustular or conglobate acne, especially when prognostically unfavorable factors are present: family history of acne, early onset, marked seborrhea, localization on the trunk, scarring, psychosocial disability or persistent/late-type acne [1]. Five patients with pityriasis rubra pilaris were treated with isotretinoin from September 1982 through 1985. Isotretinoin at an average dose of 1.16 mg/kg/day for 16 to 24 weeks caused complete or almost complete clearing in four of the five patients [2]. Isotretinoin produces significant anti-inflammatory effects by inhibition of monocyte and neutrophil chemotaxis across intact biologic barriers in vivo [3]. Isotretinoin 5 mg/day is effective in reducing the number of acne lesions, and improving patients dermatologic quality of life, with minimal adverse effects [4]. Clinical indications: Acne Toxicity: Isotretinoin is teratogenic. It also causes mucocutaneous side effects such as cheilitis, dry skin, and dry eyes.

References:

- [1]. Thielitz, A. and H. Gollnick, [Isotretinoin. How should it be used]. Hautarzt, 2013. 64(4): p. 263-8.
- [2]. Norris, D.A., et al., Isotretinoin produces significant inhibition of monocyte and neutrophil chemotaxis in vivo in patients with cystic acne. J Invest Dermatol, 1987. 89(1): p. 38-43.
- [3]. Rademaker, M., J.M. Wishart, and N.M. Birchall, Isotretinoin 5 mg daily for low-grade adult acne vulgaris - a placebo-controlled, randomized double-blind study. J Eur Acad Dermatol Venereol, 2013.
- [4]. Dicken, C.H., Isotretinoin treatment of pityriasis rubra pilaris. J Am Acad Dermatol, 1987. 16(2 Pt 1): p. 297-301.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA