# PRODUCT INFORMATION



## **Tazarotenic Acid**

Item No. 21367

CAS Registry No.: 118292-41-4

6-[2-(3,4-dihydro-4,4-dimethyl-2H-Formal Name:

1-benzothiopyran-6-yl)ethynyl]-3-

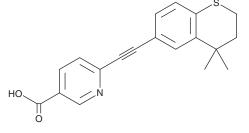
pyridinecarboxylic acid

Synonym: AGN 190299 MF: C<sub>19</sub>H<sub>17</sub>NO<sub>2</sub>S FW: 323.4 **Purity:** ≥98%

 $\lambda_{\text{max}}$ : 257, 347 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



### **Laboratory Procedures**

Tazarotenic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the tazarotenic acid in the solvent of choice, which should be purged with an inert gas. Tazarotenic acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of tazarotenic acid in these solvents is approximately 30 mg/ml.

Tazarotenic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tazarotenic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Tazarotenic acid has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Tazarotenic acid is a retinoic acid receptor (RAR) agonist and an active metabolite of the retinoid prodrug tazarotene (Item No. 23559).<sup>1</sup> It induces reporter gene expression in DK7-NR cells expressing human RARa, RAR $\beta$ , or RAR $\gamma$  (EC<sub>50</sub>s = 11, 2.5, and 11 nM, respectively). Topical application of tazarotenic acid (0.1% w/w) reduces ear edema in a mouse model of epidermal inflammation induced by phorbol 12-myristate 13-acetate (PMA; Item No. 10008014).

#### Reference

1. Aubert, J., Piwinica, D., Bertino, B., et al. Nonclinical and human pharmacology of the potent and selective topical retinoic acid receptor-y agonist trifarotene. Br. J. Dermatol. 179(2), 442-456 (2018).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFEI Y DAIA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

# WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 03/21/2023

## **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