

## Product Data Sheet

Product Name: ATRA-BA Hybrid

Cat. No.: GC46892

### Chemical Properties

Cas. No. 1037543-26-2

SMILES O=C(/C=C(/C=C/C=C(/C=C/C1=C(C)CCCC1(C)C)C)OC2=CC=C(C=C2)COC(CCC)=O

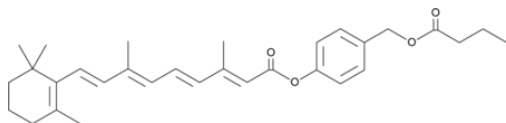
Formula C<sub>31</sub>H<sub>40</sub>O<sub>4</sub> M.Wt 476.7

Solubility DMSO: 5 mg/ml Storage Store at -20°C

General For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the tips ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution : ship with blue ice All other available size: ship with RT, or Condition blue ice upon request.

Structure



### Background

ATRA-BA hybrid is a mutual prodrug form of all- *trans* retinoic acid and butyric acid .<sup>1</sup> ATRA-BA hybrid is cleaved to release ATRA and BA in isolated mouse plasma. It inhibits the growth of MDA-MB-231 breast and PC3 prostate cancer cells with GI<sub>50</sub> values of 0.01 and 1.02 μM, respectively. ATRA-BA (20 μM) has 15-fold greater antiproliferative activity in PC3 cells compared to an equimolar concentration of ATRA and BA.

1. Gediya, L.K., Khandelwal, A., Patel, J., et al. Design, synthesis, and evaluation of novel mutual prodrugs (hybrid drugs) of all-trans-retinoic acid and histone deacetylase inhibitors with enhanced anticancer activities in breast and prostate cancer cells in vitro. *J. Med. Chem.* 51(13)3895-3904(2008)

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

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