



## **Fenretinide**

**Catalog No: tcsc0789** 

| Available Sizes   |
|---|
| Size: 10mg  |
| Size: 50mg  |
| Size: 100mg   |
| Size: 200mg   |
| Size: 500mg   |
| Size: 1g  |
| Size: 2g  |
| Size: 5g  |
| Specifications  |
| CAS No:<br>65646-68-6   |
| <b>Formula:</b> C <sub>26</sub> H <sub>33</sub> NO <sub>2</sub> |
| Pathway:<br>Metabolic Enzyme/Protease;Autophagy                 |
| Target:<br>RAR/RXR;Autophagy                                    |
| Purity / Grade: >98%  |
| Solubility:   |





DMSO :  $\geq$  130 mg/mL (332.01 mM)

## **Alternative Names:**

4-HPR

## **Observed Molecular Weight:**

391.55

## **Product Description**

Fenretinide is a synthetic retinoid deriverative, binding to the retinoic acid receptors (RAR) at concentrations necessary to induce cell death.

In Vitro: Fenretinide exerts not just acute but also long term antitumor activity in selected T-ALL cell lines. Fenretinide inhibits DES activity in CCRF-CEM leukemia cells in a dose and time dependent manner, leading to a concomitant increase of the endogenous cellular dhCer content. Fenretinide (3  $\mu$ M)-induced dhCer accumulation in both CCRF-CEM and Jurkat cells<sup>[1]</sup>. Ceramide inhibition with fenretinide protects insulin signaling. Fenretinide prevents lipid-induced reductions in insulin-stimulated glucose uptake<sup>[2]</sup>. Fenretinide inhibits OVCAR-5 cell proliferation and viability at concentrations higher than 1 microM, with 70-90% growth inhibition at 10 microM. Fenretinide (1 microM) significantly inhibits OVCAR-5 invasion after 3 days preincubation. Endothelial cells treated with 1 microM 4-HPR fails to form tubes, but forms small cellular aggregates<sup>[4]</sup>.

*In Vivo:* Fenretinide (10 mg/kg, i.p.) selectively inhibits ceramide accumulation HFD-fed male C57Bl/6 mice. Fenretinide treatment improves glucose tolerance and insulin sensitivity as determined by both glucose and insulin tolerance tests<sup>[2]</sup>. Addition of 25 mg/kg ketoconazole to Fenretinide in NOD/SCID mice increased 4-HPR plasma levels<sup>[3]</sup>.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!