LKT Laboratories, Inc.

Tamibarotene

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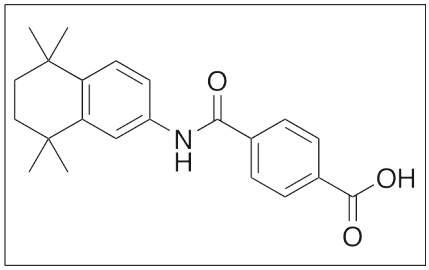
Product Information

Product ID T0249
CAS No. 94497-51-5
Chemical Name 4-((5,5,8,8-Tetramethyl-5,6,7,8-tetrahydronaphthalen-2-yl) carbamoyl)benzoic acid

Synonym Am80; Retinobenzoic acid; AM-80



Formula $C_{22}H_{25}NO_3$
Formula Wt. 351.44
Melting Point 230-232°C
Purity ≥98%
Solubility

Bulk quanitites available upon request

Product ID	Size
T0249	5 mg
T0249	10 mg
T0249	50 mg

Store Temp 4°C
Ship Temp Ambient

Description Tamibarotene is an agonist at retinoic acid receptors (RARs) and is selective primarily for RARα/β. Tamibarotene exhibits neuroprotective, cognition enhancing, immunomodulatory, and anticancer chemotherapeutic benefits. Tamibarotene upregulates tropomysin-related kinase B and growth-associated protein 43, inducing neuronal differentiation. In vivo, tamibarotene activates the ADAM10-Notch-Hes5 signaling pathway, inhibiting deterioration of working memory and improving cognitive deficits in dementia and Alzheimer's disease. Tamibarotene also prevents decreases in acetylcholine and decreases secretion of inflammatory cytokines and anxiety in models of Alzheimer's disease. Tamibarotene decreases iron-induced oxidative stress in vivo, decreasing blood glucose levels and hepatic iron content. In animal models of vasculitis, this compound inhibits neutrophil migration, ROS production, and phosphorylation of ERK 1/2 and p38. Tamibarotene also exhibits immunomodulatory effects in animal models of graft-versus-host disease (GVHD) and experimental autoimmune encephalitis (EAE), altering Th1 and Th17 responses. Additionally, tamibarotene may inhibit cell growth in leukemia cells and induce partial regression of tumors in animal models of cancer.

References

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