Tribioscience

TTNPB, Retinoic RAR agonist

Catalog	Unit
TBI2517-5MG	5 mg
TBI2517-25MG	25 mg

Product Details

Formal Name: 4-[(E)-2-(5,6,7,8-Tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-1-propenyl]benzoic acid Alternate Names: Ro 13-7410; AGN-191183; Arotinoid acid Molecular Formula: $C_{24}H_{28}O_2$ Formula Weight: 348.50 CAS Number: 71441-28-6 Purity: >98% Formulation: powder Solubility: Soluble in DMSO (up to 4 mg/ml). Storage: -20°C Stability: \geq 2 years.

Applications

Retinoic RAR agonist

Functions

A highly potent and selective retinoic acid analog acting as an RAR agonist (EC50 = 21, 4 and 2.4 nM for RAR α , RAR β and RAR γ respectively). TTNPB has been extensively used in stem cell differentiation protocols. It enhances reprogramming efficiency in chemically induced pluripotent stem cells. Chondrocytes are robustly induced from human pluripotent stem cells by treatment with CHIR99021 and TTNPB. TTNPB alone, efficiently converts primary adult mouse fibroblasts into dermal papilla cell-like cells. Can be used in combination with other small molecules for induction of mouse totipotent stem cells.

Application Procedures

First dissolved in DMSO (up to 4 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° C for up to 3 months.

For research use only.