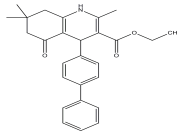


PRODUCT: ITD-1**ALTERNATE NAME:** 4-[1,1'-Biphenyl]-4-yl-1,4,5,6,7,8-hexahydro-2,7,7-trimethyl-5-oxo-3-quinolinecarboxylic acid ethyl ester**CATALOG #:** 2879-10, 50**AMOUNT:** 10 mg, 50 mg**STRUCTURE:****MOLECULAR FORMULA:** C₂₇H₂₉NO₃**MOLECULAR WEIGHT:** 415.52**CAS NUMBER:** 1099644-42-4**APPEARANCE:** Off-white solid**SOLUBILITY:** DMSO (~8 mg/ml) or EtOH (~4 mg/ml with warming)**PURITY:** ≥98% by HPLC**STORAGE:** Store at -20 °C. Protect from air and light**DESCRIPTION:** ITD-1 is a potent and highly selective TGFβ pathway inhibitor (IC₅₀ = 0.85 μM). ITD-1 promotes cardiomyocyte differentiation specifically via degradation of the TGFβ type II receptor (TGFBR2), effectively clearing the receptor from the cell surface and selectively inhibiting intracellular signaling (IC₅₀ 0.4–0.8 μM), revealing a role for TGFβ signaling mechanism as a repressor of cardiomyocyte fate. ITD-1 does not induce differentiation of vascular smooth muscle cells or endothelial cells.**REFERENCES:** Willems, E., *et al.* (2012). *Cell Stem Cell* **11**, 242-252.**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.**RELATED PRODUCTS:**A83-01 (**Cat. No. 1725-1**)EZSolution™ A83-01, Sterile-Filtered (**Cat. No. 1989-1**)GW788388 (**Cat. No. 2820-10, 50**)LY364947 (**Cat. No. 2646-1,5**)RepSox (**Cat. No. 1894-5, 25**)EZSolution™ RepSox (**Cat. No. 2641-5**)SB-431542 (**Cat. No. 1674-1, 5**)EZSolution™ SB-431542, Sterile-Filtered (**Cat. No. 1992-1**)SMAD3 Inhibitor, SIS3 (**Cat. No. 2227-1, 5**)**USAGE:** **FOR RESEARCH CH USE ONLY! Not to be used in humans**