LKT Laboratories, Inc.

A 83-01

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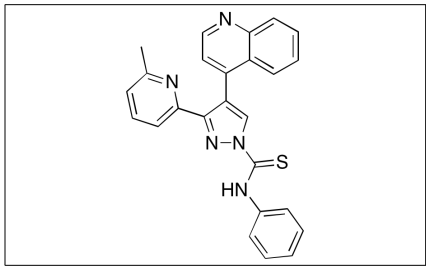
Product Information

Product ID A001001
CAS No. 909910-43-6
Chemical Name 3-(6-Methyl-2-pyridinyl)-N-phenyl-4-(4-quinolinyl)-1H-pyrazole-1-carbothioamide

Synonym A83-01; ALK5 Inhibitor IV; 1H-Pyrazole-1-carbothioamide,3-(6-methyl-2-pyridinyl)-N-phenyl-4-(4-quinolinyl)-

Formula $C_{25}H_{19}N_5S$
Formula Wt. 421.52
Melting Point
Purity ≥98%
Solubility Soluble in DMSO
1mg/mL in ethanol
2.5mg/mL in ethyl acetate



Bulk quanitites available upon request

Product ID	Size
A001001	5 mg
A001001	25 mg
A001001	100 mg

Store Temp -20˚C
Ship Temp Ambient

Description A 83-01 is a TGFbeta receptor inhibitor found to suppress over-expression of pro-fibrogenic factors. When applied in concert with Y27632 and CHIR99021, A 83-01 treatment resulted in transformation of rat mature hepatocytes into proliferative bipotent cells. A study on a mouse model treated with A 83-01 resulted in decrease in cardiac fibrosis and increase in miocardial viability. Topical application of A 83-01 to second-degree burns in rat skin reduced wound contraction during healing without delaying the wound closure.

References

Katsuda T, Kawamata M, Hagiwara K, et al. Conversion of terminally committed hepatocytes to culturable bipotent progenitor cells with regenerative capacity. Cell Stem Cell. 2017 Jan 5;20(1):41-55. PMID: 27840021.

Wang H, Liu S, Wang Y, et al. Nod-like receptor protein 3 inflammasome activation by Escherichia coli RNA induces transforming growth factor beta 1 secretion in hepatic stellate cells. Bosn J Basic Med Sci. 2016 Jan 14;16(2):126-131. PMID: 26773180.

Nishino Y, Murakami M, Funaba M. Expression and role of the TGF-beta family in glial cells infected with Borna disease virus. Microbes Infect. 2016 Feb;18(2):128-136. PMID: 26482505.

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Sun X, Kim YH, Phan TN, et al. Topical application of ALK5 inhibitor A-83-01 reduces burn wound contraction in rats by suppressing myofibroblast population. Biosci Biotechnol Biochem. 2014;78(11):1805-1812. PMID: 25351330.

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