LKT Laboratories, Inc.

RITA

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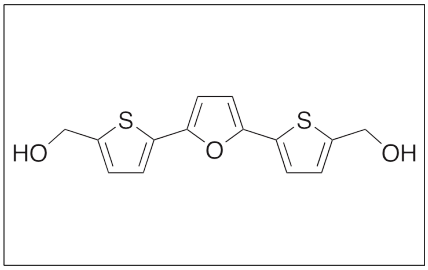
Product Information

Product ID R3476
CAS No. 213261-59-7
Chemical Name

Synonym Reactivation of p53 and induction of tumor cell apoptosis



Formula $C_{14}H_{12}O_3S_2$
Formula Wt. 292.37
Melting Point
Purity ≥98%
Solubility Soluble in DMSO (58 mg/ml at 25° C), ethanol (8 mg/ml at 25° C), DMF (30 mg/ml), 1:1 solution of dimethyl formamide: PBS (pH 7.2) (0.5 mg/ml, dissolve RITA first in dimethyl
Store Temp -20°C
Ship Temp Ambient

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
R3476	1 mg	$71.70
R3476	5 mg	$132.30
R3476	10 mg	$231.50
R3476	25 mg	$441.00

Description Reactivation of p53 and induction of tumor cell apoptosis (RITA) is an activator of p53 that exhibits anticancer chemotherapeutic and anti-angiogenic activities. In vivo, RITA downregulates expression of VEGF, HIF-1α, p21, and HDM2. In cellular and animal models of neuroblastoma, RITA inhibits expression of N-Myc, AurK, Mcl-1, Bcl-2, MDM2, and MDMX, inducing apoptosis and inhibiting growth. Similar effects are observed in models of gastrointestinal stromal tumors and cervical carcinoma.

References

Burmakin M, Shi Y, Hedström E, et al. Dual targeting of wild-type and mutant p53 by small molecule RITA results in the inhibition of N-Myc and key survival oncogenes and kills neuroblastoma cells in vivo and in vitro. Clin Cancer Res. 2013 Sep 15;19(18):5092-103. PMID: 23864164.

Henze J, Mühlenberg T, Simon S, et al. p53 modulation as a therapeutic strategy in gastrointestinal stromal tumors. PLoS One. 2012;7(5):e37776. PMID: 22662219.

Zhao CY, Szekely L, Bao W, et al. Rescue of p53 function by small-molecule RITA in cervical carcinoma by blocking E6-mediated degradation. Cancer Res. 2010 Apr 15;70(8):3372-81. PMID: 20395210.

Yang J, Ahmed A, Poon E, et al. Small-molecule activation of p53 blocks hypoxia-inducible factor 1alpha and vascular endothelial growth factor expression in vivo and leads to tumor cell apoptosis in normoxia and hypoxia. Mol Cell Biol. 2009 Apr;29(8):2243-53. PMID: 19223463.