

Catalog # 10-2982 Tenovin-1

CAS# 380315-80-0 N-[(4-Acetamidophenyl)carbamothioyl]-4-tert-butylbenzamide Lot # X109721



Tenovin-1 activates p53 via inhibition of SIRT1 and SIRT2.^{1,2} Induces apoptosis in a variety of cancer cell lines including cutaneous T-cell lymphoma³ and melanoma⁴ among others⁵. Induces cellular senescence in cultured rat primary astrocytes⁶ as well as other cell types.

- 1) Lain et al. (2008), Discovery, in vivo activity, and mechanism of action of a small-molecule p53 activator; Cancer Cell, 13 454
- Sonnemann et al. (2014), p53-dependent and p53-independent anticancer effects of different histone deacetylase inhibitors;
 Br. J. Cancer 110 656
- 3) Nihal et al. (2014), SIRT1 is upregulated in cutaneous T-cell lymphoma, and its inhibition induces growth arrest and apoptosis; Cell Cycle **13** 632
- 4) Wilking et al. (2014), SIRT1 deacetylase is overexpressed in human melanoma and its small molecule inhibition imparts antiproliferative response via p53 activation; Arch. Biochem. Biophys. **563** 94
- 5) Marx et al. (2018), The sirtuin 1/2 inhibitor tenovin-1 induces a nonlinear apoptosis-inducing factor-dependent cell death in a p53 null Ewing's sarcoma cell line; Invest. New Drugs **36** 396
- 6) Bang et al. (2019), Tenovin-1 Induces Senescence and Decreases Wound-Healing Activity in Cultured Rat Primary Astrocytes; Biomol. Ther. (Seoul) 27 283

PHYSICAL DATA

Molecular Weight:	369.48
Molecular Formula:	C ₂₀ H ₂₃ N ₃ O ₂ S
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (10 mg/ml with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 2 years from the date of purchase. Solutions in
	DMSO may be stored at -20°C for up to 3 months.

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