# **PRODUCT** INFORMATION



## Tenovin-1

Item No. 13085

CAS Registry No.:	380315-80-0	
Formal Name:	N-[[[4-(acetylamino)phenyl]	H
	amino]thioxomethyl-4-(1,1-	
	dimethylethyl)]-benzamide	
MF:	C <sub>20</sub> H <sub>23</sub> N <sub>3</sub> O <sub>2</sub> S	O S     Ö
FW:	369.5	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 274 nm	
Supplied as:	A crystalline solid	$\times$ $\sim$
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

Tenovin-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the tenovin-1 in the solvent of choice, which should be purged with an inert gas. Tenovin-1 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of tenovin-1 in these solvents is approximately 0.25 and 0.50 mg/ml, respectively.

### Description

Tenovin-1 is a small molecule activator of p53 transcriptional activity. At 10 µM, it elevates p53 expression in MCF-7 cells within two hours of treatment and longer-term exposure significantly decreases the growth of BL2 Burkitt's lymphoma and ARN8 melanoma cells.<sup>1</sup> Functioning upstream of p53, tenovin-1 acts by inhibiting the deacetylase activity of purified human SIRT1 and SIRT2, members of NAD<sup>+</sup>-dependent class III histone deacetylases that belong to the sirtuin family.<sup>1</sup> While tenovin-1 demonstrates low genotoxicity, the compound has poor water solubility, which limits its uses in vivo.

#### Reference

1. Lain, S., Hollick, J.J., Campbell, J., et al. Discovery, in vivo activity, and mechanism of action of a small-molecule p53 activator. Cancer Cell 13(5), 454-463 (2008).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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