# **PRODUCT** INFORMATION



**TX-1918** 

Item No. 20840

CAS Registry No.:	503473-32-3
Formal Name:	2-[(4-hydroxy-3,5-dimethylphenyl)
	methylene]-4-cyclopentene-1,3-dione
MF:	$C_{14}H_{12}O_3$
FW:	
Purity:	≥98% HO O
UV/Vis.:	λ <sub>max</sub> : 220, 248, 370 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

# Laboratory Procedures

TX-1918 is supplied as a crystalline solid. A stock solution may be made by dissolving the TX-1918 in the solvent of choice, which should be purged with an inert gas. TX-1918 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). TX-1918 is slightly soluble in ethanol and DMF and soluble in DMSO at a concentration of approximately 0.33 mg/ml.

# Description

TX-1918 is a cell-permeable tyrphostin derivative that inhibits eukaryotic elongation factor-2 kinase (eEF-2K; IC<sub>50</sub> = 440 nM).<sup>1</sup> It inhibits Src, PKA, PKC, and EGFR kinases at much higher concentrations (IC<sub>50</sub>s = 4.4, 44, 44, and 440  $\mu$ M, respectively).<sup>1</sup> TX-1918 disrupts the proliferation of HepG2 and HCT116 tumor cells (EC<sub>50</sub>s = 2.07 and 230  $\mu$ M, respectively) with ≥5,000-fold and ≥90-fold reduced mitochondrial- and hepato-toxicity, respectively when compared with the tyrphostin AG-17 (Item No. 10010248).<sup>1</sup>

# Reference

1. Hori, H., Nagasawa, H., Ishibashi, M., et al. TX-1123: An antitumor 2-hydroxyarylidene-4-cyclopentene-1,3-dione as a protein tyrosine kinase inhibitor having low mitochondrial toxicity. Bioor. Med. Chem. Lett. 10(10), 3257-3265 (2002).

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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