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## **Data Sheet**

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Juglone
Cat. No.	:	PC-61683
CAS No.	:	481-39-0
Molecular Formula	:	C <sub>10</sub> H <sub>6</sub> O <sub>3</sub>
Molecular Weight	:	174.16
Target	:	Other Targets
Solubility	:	10 mM in DMSO



## **Biological Activity**

Juglone (5-HN) is a plant-derived 1,4-naphthoquinone with confirmed antibacterial and antitumor activities. Juglone inhibits the S. aureus bacterial tricarboxylic acid cycle (TCA cycle), as well as DNA and RNA synthesis, thus leading to cell collapse.

Juglone induces apoptosis of tumor stem-like cells through ROS-p38 pathway in glioblastoma in vitro and in vivo. Juglone also reactivates latent HIV-1 through ROS and NF-kappaB without inducing global T cell activation.

## References

Wang J, et al. Nat Prod Commun. 2016 Jun;11(6):825-7.

Yang HC, et al. J Clin Invest. 2009 Nov;119(11):3473-86.

Wu J, et al. BMC Neurol. 2017 Apr 7;17(1):70.

Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com