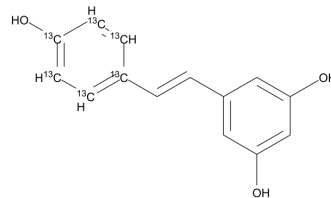


Resveratrol-¹³C₆

Cat. No.:	HY-16561S1
Molecular Formula:	C ₈ ¹³ C ₆ H ₁₂ O ₃
Molecular Weight:	234.2
Target:	Fungal; IKK; Apoptosis; Keap1-Nrf2; Bacterial; Autophagy; Sirtuin; Mitophagy; Antibiotic; Isotope-Labeled Compounds
Pathway:	Anti-infection; NF-κB; Apoptosis; Autophagy; Cell Cycle/DNA Damage; Epigenetics; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Resveratrol- ¹³ C ₆ is the ¹³ C-labeled Resveratrol. Resveratrol (trans-Resveratrol; SRT501), a natural polyphenolic phytoalexin that possesses anti-oxidant, anti-inflammatory, cardioprotective, and anti-cancer properties. Resveratrol (SRT 501) has a wide spectrum of targets including mTOR, JAK, β-amyloid, Adenylyl cyclase, IKKβ, DNA polymerase. Resveratrol also is a specific SIRT1 activator[1][2][3][4]. Resveratrol is a potent pregnane X receptor (PXR) inhibitor[5]. Resveratrol is an Nrf2 activator, ameliorates aging-related progressive renal injury in mice model[6]. Resveratrol increases production of NO in endothelial cells[7].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Lee MH, et al. Resveratrol suppresses growth of human ovarian cancer cells in culture and in a murine xenograft model: eukaryotic elongation factor 1A2 as a potential target. *Cancer Res.* 2009 Sep 15;69(18):7449-58.
- [3]. Huige Li, et al. Resveratrol and Vascular Function. *Int J Mol Sci.* 2019 Apr 30;20(9):2155.
- [4]. Du LL, et al. Activation of sirtuin 1 attenuates cerebral ventricular streptozotocin-induced tau hyperphosphorylation and cognitive injuries in rat hippocampi. *Age (Dordr).* 2014 Apr;36(2):613-23.
- [5]. Lu R, et al. Resveratrol, a natural product derived from grape, exhibits antiestrogenic activity and inhibits the growth of human breast cancer cells. *J Cell Physiol.* 1999 Jun;179(3):297-304.
- [6]. Eun Nim Kim, et al. Resveratrol, an Nrf2 activator, ameliorates aging-related progressive renal injury. *Aging (Albany NY).* 2018 Jan; 10(1): 83–99.
- [7]. Pirola L, et al. Resveratrol: one molecule, many targets. *IUBMB Life.* 2008 May;60(5):323-32.
- [8]. Smutny T, et al. Resveratrol as an inhibitor of pregnane X receptor (PXR): another lesson in PXR antagonism. *J Pharmacol Sci.* 2014;126(2):177-8.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA