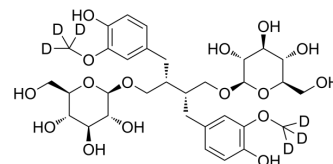


## (R,R)-Secoisolariciresinol diglucoside-d<sub>6</sub>

<b>Cat. No.:</b>	HY-N6937S1
<b>Molecular Formula:</b>	C <sub>32</sub> H <sub>40</sub> D <sub>6</sub> O <sub>16</sub>
<b>Molecular Weight:</b>	692.74
<b>Target:</b>	Isotope-Labeled Compounds
<b>Pathway:</b>	Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	(R,R)-Secoisolariciresinol diglucoside-d <sub>6</sub> is deuterated labeled (R,R)-Secoisolariciresinol diglucoside (HY-N6937). (R,R)-Secoisolariciresinol diglucoside ((R,R)-SDG) is the minor isomer of Secoisolariciresinol diglucoside in flaxseed. (R,R)-Secoisolariciresinol diglucoside ((R,R)-SDG) possesses antioxidant and free radical scavenging activities and DNA-radioprotective properties. (R,R)-Secoisolariciresinol diglucoside ((R,R)-SDG) inhibits myeloperoxidase (MPO) activity by suppressing both the peroxidase and chlorination cycles in inflammatory cells <sup>[1][2][3]</sup> .
<b>In Vitro</b>	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 <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Mishra OP, et al. Novel synthetic (S,S) and (R,R)-secoisolariciresinol diglucosides (SDGs) protect naked plasmid and genomic DNA From gamma radiation damage. *Radiat Res.* 2014 Jul;182(1):102-10.
- [2]. Mishra OP, et al. Synthesis and antioxidant evaluation of (S,S)- and (R,R)-secoisolariciresinol diglucosides (SDGs). *Bioorg Med Chem Lett.* 2013 Oct 1;23(19):5325-8.
- [3]. Mishra OP, et al. Synthetic secoisolariciresinol diglucoside (LGM2605) inhibits myeloperoxidase activity in inflammatory cells. *Biochim Biophys Acta Gen Subj.* 2018 Jun;1862(6):1364-1375.
- [4]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019 Feb;53(2):211-216.

**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