## **Product** Data Sheet

## (R)-Verapamil-d7 hydrochloride

Cat. No.: HY-135336S Molecular Formula:  $C_{27}H_{32}D_7ClN_2O_4$ 

Molecular Weight: 498.11

Target: P-glycoprotein; Apoptosis; Isotope-Labeled Compounds

Pathway: Membrane Transporter/Ion Channel; Apoptosis; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description

(R)-Verapamil- $d_7$  (hydrochloride) is a deuterium labeled (R)-Verapamil hydrochloride. (R)-Verapamil hydrochloride ((R)-(+)-Verapamil hydrochloride) is a P-Glycoprotein inhibitor. (R)-Verapamil hydrochloride blocks MRP1 mediated transport, resulting in chemosensitization of MRP1-overexpressing cells to anticancer agents[1][2].

## **REFERENCES**

[1]. Plumb JA, et al. The activity of verapamil as a resistance modifier in vitro in drug resistant human tumour cell lines is not stereospecific. Biochem Pharmacol. 1990 Feb 15;39(4):787-92.

[2]. Perrotton T, et al. (R)- and (S)-verapamil differentially modulate the multidrug-resistant protein MRP1. J Biol Chem. 2007 Oct 26;282(43):31542-8. Epub 2007 Jul 22.

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

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