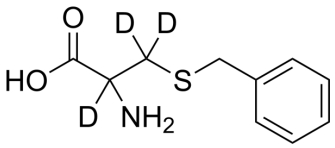
S-Benzyl-DL-cysteine-2,3,3-d_3

Cat. No.:	HY-144354S
CAS No.:	51494-04-3
Molecular Formula:	$C_{10}H_{10}D_3NO_2S$
Molecular Weight:	214.3
Target:	Isotope-Labeled Compounds; ASCT
Pathway:	Others

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



BIOLOGICAL ACTIVITY

Description	S-Benzyl-DL-cysteine-2,3,3-d_3 is a deuterium labeled Benzylcysteine. Benzylcysteine is an ASCT2 inhibitor that binds to ASCT2 with an apparent Ki of 780 μM. Benzylcysteine inhibit ASCT2 function based on a competitive mechanism, indicating that Benzylcysteine binds to the substrate-binding site of ASCT2[1].
IC_{50} & Target	ASCT2 780 μM (Ki)
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]. Christof Grewer, et al. New inhibitors for the neutral amino acid transporter ASCT2 reveal its Na+-dependent anion leak. J Physiol. 2004 Jun 15;557(Pt 3):747-59.

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