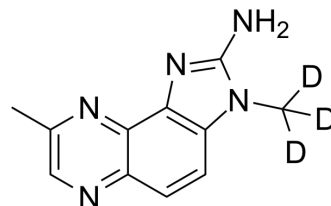


## MeIQx-d3

<b>Cat. No.:</b>	HY-W355129S		
<b>CAS No.:</b>	122457-31-2		
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>8</sub> D <sub>3</sub> N <sub>5</sub>		
<b>Molecular Weight:</b>	216.26		
<b>Target:</b>	Isotope-Labeled Compounds		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	MeIQx-d3 is the deuterium labeled MeIQx (HY-W355129) <sup>[1]</sup> . MeIQx is a heterocyclic amine (HAs) compound and a dietary aromatic amine, which can bind covalently to hemoglobin. MeIQx is a mutagenic compound that induces liver tumors <sup>[2]</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> . MeIQx (0.47 mM; 0-120 min) binds covalently to mouse hemoglobin and is activated by mouse microsomes to metabolites <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	MeIQx (2.0-200 mg/kg; i.p.; male Swiss Webster mice) is in the covalent binding to hemoglobin in a dose-dependent manner [2]. 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 Feb;53(2):211-216.
- [2]. Lynch AM, et, al. The measurement of MeIQx adducts with mouse haemoglobin in vitro and in vivo: implications for human dosimetry. *Carcinogenesis.* 1991 Jun;12(6):1067-72.

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

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