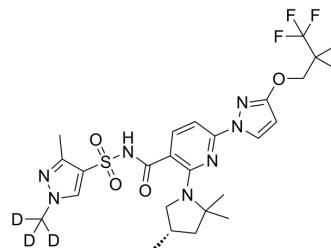


## Elexacaftor-d3

<b>Cat. No.:</b>	HY-111772S1		
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>31</sub> D <sub>3</sub> F <sub>3</sub> N <sub>7</sub> O <sub>4</sub> S		
<b>Molecular Weight:</b>	600.67		
<b>Target:</b>	Isotope-Labeled Compounds		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	Elexacaftor-d3 (VX-445-d3) is the deuterium labeled Elexacaftor (HY-111772) <sup>[1]</sup> .
<b>In Vitro</b>	<p>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>.</p> <p>Elexacaftor (VX-445) is a next-generation cystic fibrosis transmembrane conductance regulator (CFTR) corrector designed to restore Phe508del CFTR protein function. Elexacaftor (VX-445) has the potential to treat cystic fibrosis. VX-445-Tezacaftor-VX-770 significantly improves Phe508del CFTR protein processing, trafficking, and chloride transport to a greater extent than any two of these agents in dual combination<sup>[2]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
- [2]. Keating D, et al. VX-445-Tezacaftor-VX-770 in Patients with Cystic Fibrosis and One or Two Phe508del Alleles. *N Engl J Med*. 2018 Oct 25;379(17):1612-1620.

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

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