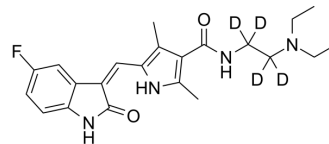


Sunitinib-d4

Cat. No.:	HY-10255AS1
CAS No.:	1126721-79-6
Molecular Formula:	C ₂₂ H ₂₃ D ₄ FN ₄ O ₂
Molecular Weight:	402.5
Target:	VEGFR; PDGFR; IRE1; Mitophagy; Autophagy; Apoptosis
Pathway:	Protein Tyrosine Kinase/RTK; Cell Cycle/DNA Damage; Autophagy; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Sunitinib-d4 (SU 11248-d4) is the deuterium labeled Sunitinib. Sunitinib (SU 11248) is a multi-targeted receptor tyrosine kinase inhibitor with IC ₅₀ s of 80 nM and 2 nM for VEGFR2 and PDGFRβ, respectively ^[1] . Sunitinib, an ATP-competitive inhibitor, effectively inhibits autophosphorylation of Ire1α by inhibiting autophosphorylation and consequent RNase activation ^[2] .
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

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- [2]. Sun L, et al. Discovery of 5-[5-fluoro-2-oxo-1,2-dihydroindol-(3Z)-ylidenemethyl]-2,4-dimethyl-1H-pyrrole-3-carboxylic acid (2-diethylaminoethyl)amide, a novel tyrosine kinase inhibitor targeting vascular endothelial and platelet-derived growth factor receptor tyrosine kinase. *J Med Chem.* 2003 Mar 27;46(7):1116-9.
- [3]. Ali MM, et al. Structure of the Ire1 autophosphorylation complex and implications for the unfolded protein response. *EMBO J.* 2011 Mar 2;30(5):894-905.
- [4]. O'Farrell AM, et al. SU11248 is a novel FLT3 tyrosine kinase inhibitor with potent activity in vitro and in vivo. *Blood.* 2003 May 1;101(9):3597-605.
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Caution: Product has not been fully validated for medical applications. For research use only.

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