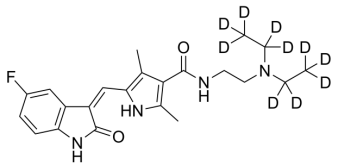
Sunitinib-d_{10}

Cat. No.:	HY-10255AS
CAS No.:	1126721-82-1
Molecular Formula:	$C_{22}H_{17}D_{10}FN_4O_2$
Molecular Weight:	408.54
Target:	VEGFR; PDGFR; IRE1; Mitophagy; Autophagy; Apoptosis
Pathway:	Protein Tyrosine Kinase/RTK; Cell Cycle/DNA Damage; Autophagy; Apoptosis
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 20.83 mg/mL (50.99 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions

Mass / Solvent / Concentration	1 mg	5 mg	10 mg
1 mM	2.4477 mL	12.2387 mL	24.4774 mL
5 mM	0.4895 mL	2.4477 mL	4.8955 mL
10 mM	0.2448 mL	1.2239 mL	2.4477 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Sunitinib-d_{10} is a deuterium labeled Sunitinib. Sunitinib is a multi-targeted receptor tyrosine kinase inhibitor with IC50s 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].

IC_{50} & Target	VEGFR2	PDGFRβ
	80 nM (IC_{50})	2 nM (IC_{50})

REFERENCES

[1]. 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.

[2]. 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.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA