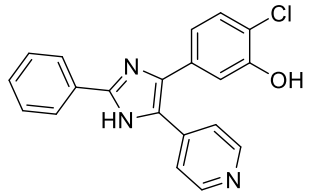
Product data sheet

MedKoo Cat#: 406667 Name: L-779450 CAS#: 303727-31-3 Chemical Formula: $C_{20}H_{14}ClN_3O$ Exact Mass: 347.08254 Molecular Weight: 347.8	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
L-779450 is a potent, selective and ATP-competitive Raf kinase inhibitor (IC50 = 10 nM). L-779450 suppresses DNA synthesis and induces apoptosis in cells that proliferate in response to Raf-1 and A-Raf but not B-Raf.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	44.67	128.44
DMF	30.0	86.26
DMF:PBS (pH 7.2) (1:7)	0.12	0.35
Ethanol	2.0	5.75

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.88 mL	14.38 mL	28.75 mL
5 mM	0.58 mL	2.88 mL	5.75 mL
10 mM	0.29 mL	1.44 mL	2.88 mL
50 mM	0.06 mL	0.29 mL	0.58 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

1. Berger A, Quast SA, Plötz M, Kuhn NF, Trefzer U, Eberle J. RAF inhibition overcomes resistance to TRAIL-induced apoptosis in melanoma cells. J Invest Dermatol. 2014 Feb;134(2):430-440. doi: 10.1038/jid.2013.347. Epub 2013 Aug 16. PMID: 23955071.

In vivo study

TBD

7. Bioactivity
Biological target:

L-779450 is a potent and selective B-Raf kinase inhibitor with a Kd of 2.4 nM.

In vitro activity

Product data sheet

The pan-RAF inhibitor L-779,450 was applied for understanding the relations of RAF inhibition and apoptosis regulation in melanoma cells. Strong and dose-dependent phosphorylated ERK (pERK) downregulation was seen by L-779,450 in the BRAF(V600E)-mutated, TRAIL-sensitive melanoma cell line A-375, as well as in TRAIL-resistant A-375-TS.

Reference: J Invest Dermatol. 2014 Feb;134(2):430-440. https://pubmed.ncbi.nlm.nih.gov/23955071/

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.