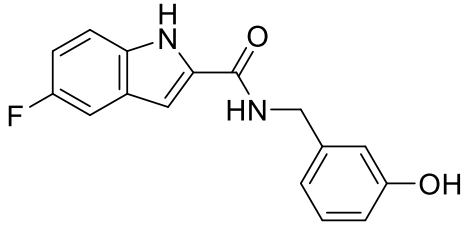


Product data sheet



MedKoo Cat#: 406540 Name: KX1-004 CAS: 518058-84-9 Chemical Formula: C ₁₆ H ₁₃ FN ₂ O ₂ Exact Mass: 284.09611 Molecular Weight: 284.2904	
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:

KX1-004 is an Src-protein tyrosine kinase inhibitor to reduce cisplatin ototoxicity while preserving its antitumor effect. KX1-004 has been used to protect the cochlea from hazardous noise.

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
DMF	30.0	105.53
DMSO	59.0	207.53
Ethanol	15.75	55.40

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.52 mL	17.59 mL	35.18 mL
5 mM	0.70 mL	3.52 mL	7.04 mL
10 mM	0.35 mL	1.76 mL	3.52 mL
50 mM	0.07 mL	0.35 mL	0.70 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

TBD

In vivo study

1. Fetoni AR, Bielefeld EC, Paludetti G, Nicotera T, Henderson D. A putative role of p53 pathway against impulse noise induced damage as demonstrated by protection with pifithrin-alpha and a Src inhibitor. *Neurosci Res.* 2014 Apr-May;81-82:30-7. doi: 10.1016/j.neures.2014.01.006. Epub 2014 Jan 25. PMID: 24472721.

2. Bielefeld EC, Wantuck R, Henderson D. Postexposure treatment with a Src-PTK inhibitor in combination with N-l-acetyl cysteine to reduce noise-induced hearing loss. *Noise Health.* 2011 Jul-Aug;13(53):292-8. doi: 10.4103/1463-1741.82962. PMID: 21768733.

7. Bioactivity

Biological target:

KX1-004 is a potent and non-ATP competitive Src-PTK inhibitor with an IC₅₀ of 40 μM.

In vitro activity

TBD

Product data sheet



In vivo activity

Chinchillas were pre-treated with a local administration of pifithrin alpha or KX1-004 and exposed to impulse noise. KX1-004 and pifithrin alpha both decreased threshold shift and the number of missing outer hair cells.

Reference: Neurosci Res. 2014 Apr-May;81-82:30-7. <https://pubmed.ncbi.nlm.nih.gov/24472721/>

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.