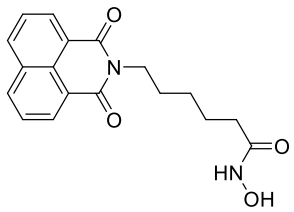


Product data sheet



MedKoo Cat#: 406810 Name: Scriptaid CAS#: 287383-59-9 Chemical Formula: C ₁₈ H ₁₈ N ₂ O ₄ Exact Mass: 326.1267 Molecular Weight: 326.35	
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:

Scriptaid, also known as GCK 1026, is a HDAC inhibitor. Scriptaid protects against traumatic brain injury via modulation of PTEN and AKT pathway. Scriptaid improves in vitro development and nuclear reprogramming of somatic cell nuclear transfer bovine embryos. Scriptaid enhances the response of human tumor cells to radiation. Scriptaid, induces glioma cell apoptosis through JNK activation and inhibits telomerase activity.

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	3	9.19
DMSO	2.5	7.66

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.06 mL	15.32 mL	30.64 mL
5 mM	0.61 mL	3.06 mL	6.13 mL
10 mM	0.31 mL	1.53 mL	3.06 mL
50 mM	0.06 mL	0.31 mL	0.61 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. Yap ZH, Kong WY, Azeez AR, Fang CM, Ngai SC. Anti-Cancer Effects of Epigenetics Drugs Scriptaid and Zebularine in Human Breast Adenocarcinoma Cells. *Anticancer Agents Med Chem.* 2022;22(8):1582-1591. doi: 10.2174/1871520621666210608103251. PMID: 34102995.
2. Sun N, Uda Y, Azab E, Kochen A, Santos RNCE, Shi C, Kobayashi T, Wein MN, Divieti Pajevic P. Effects of histone deacetylase inhibitor Scriptaid and parathyroid hormone on osteocyte functions and metabolism. *J Biol Chem.* 2019 Jun 21;294(25):9722-9733. doi: 10.1074/jbc.RA118.007312. Epub 2019 May 8. PMID: 31068415; PMCID: PMC6597811.

In vivo study

1. Yang H, Gao X, Su J, Jiang H, Lei Y, Ni W, Gu Y. Pharmacokinetics and Acute Toxicity of a Histone Deacetylase Inhibitor, Scriptaid, and its Neuroprotective Effects in Mice After Intracranial Hemorrhage. *CNS Neurol Disord Drug Targets.* 2020;19(1):55-65. doi: 10.2174/1871527319666191220111126. PMID: 31858907.
2. Meng Q, Yang G, Yang Y, Ding F, Hu F. Protective effects of histone deacetylase inhibition by Scriptaid on brain injury in neonatal rat models of cerebral ischemia and hypoxia. *Int J Clin Exp Pathol.* 2020 Feb 1;13(2):179-191. PMID: 32211098; PMCID: PMC7061803.

Product data sheet



7. Bioactivity

Biological target:

Scriptaid is a potent HDAC inhibitor, is a sensitizer to antivirals, and has potential for Epstein Barr virus (EBV)-associated lymphomas treatment.

In vitro activity

Scriptaid is a potential anti-cancer drug, either alone or in combination with zebularine, for breast cancer treatment. MDA-MB-231 cells exhibited a significant reduction in cell migration after the combination of scriptaid and zebularine. Scriptaid and the combination induced cell cycle arrest at the G0/G1 phase. All treatments induced apoptotic features in both cell lines.

Reference: Anticancer Agents Med Chem. 2022;22(8):1582-1591. <https://pubmed.ncbi.nlm.nih.gov/34102995/>

In vivo activity

Scriptaid is a potential treatment for brain injury after intracranial hemorrhage (ICH). In a mouse model of ICH model, Scriptaid reduced neurological deficits, brain atrophy, and white matter injury in a dose-dependent manner. Scriptaid also decreased the expression of pro-inflammatory cytokines IL1 β and TNF α , as well as iNOS, after ICH.

Reference: CNS Neurol Disord Drug Targets. 2020;19(1):55-65. <https://pubmed.ncbi.nlm.nih.gov/31858907/>

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.