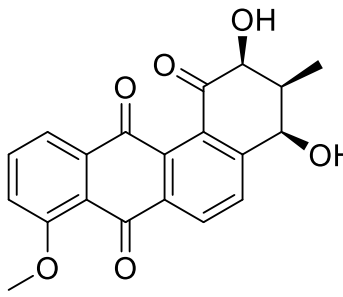


Product data sheet



MedKoo Cat#: 464348 Name: Rubiginone D2 CAS#: 274913-71-2 Chemical Formula: C ₂₀ H ₁₆ O ₆ Exact Mass: 352.0947 Molecular Weight: 352.34	
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:

Rubiginone D2 is a polyketide that has been found in *Streptomyces* that has antibacterial and anticancer activities. It is active against *S. aureus* and *E. coli*, but not *B. subtilis*, in agar diffusion assays when used at a concentration of 64 µg/disc.

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
To be determined	To be determined	To be determined

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.84 mL	14.19 mL	28.38 mL
5 mM	0.57 mL	2.84 mL	5.68 mL
10 mM	0.28 mL	1.42 mL	2.84 mL
50 mM	0.06 mL	0.28 mL	0.57 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. Puder C, Zeeck A, Beil W. New biologically active rubiginones from *Streptomyces* sp. *J Antibiot* (Tokyo). 2000 Apr;53(4):329-36. doi: 10.7164/antibiotics.53.329. PMID: 10866213.
2. Ogasawara M, Hasegawa M, Hamagishi Y, Kamei H, Oki T. Potentiation of vincristine cytotoxicity by rubiginone B1 and piperazine A in human Moser and K562 cells--mode of action. *J Antibiot* (Tokyo). 1992 Jan;45(1):129-32. doi: 10.7164/antibiotics.45.129. PMID: 1548183. <https://pubmed.ncbi.nlm.nih.gov/1548183/>

In vivo study

To be determined

7. Bioactivity

Biological target:

Rubiginone D2 inhibits growth of HM02, KATO III, HepG2, and MCF-7 cancer cells (GI50s = 0.1, 0.7, <0.1, and 7.5 µmol/L).

In vitro activity

The rubiginones (rubiginone D2 (2), 4-O-acetyl-rubiginone D2 (3), rubiginone H (6), and rubiginone I (7)) inhibit the growth of some Gram-positive bacteria and are cytostatically active against different tumor cell lines.

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Reference: J Antibiot (Tokyo). 2000 Apr;53(4):329-36. <https://pubmed.ncbi.nlm.nih.gov/10866213/>

In vivo activity

To be determined

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.