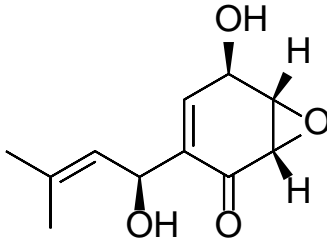


Product data sheet



MedKoo Cat#: 531391 Name: Panepoxydone CAS: 31298-54-1 Chemical Formula: C ₁₁ H ₁₄ O ₄ Exact Mass: 210.0892 Molecular Weight: 210.229		
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:

Panepoxydone is a fungal metabolite that inhibits NF-κB transcription factor by preventing IκB phosphorylation, thus inhibiting the release of NF-κB from the IκB : NF-κB complex and its translocation into the nucleus. Panepoxydone also has antimalarial, cytotoxic activities and anti-parasitic activity against *Trypanosoma cruzi*.

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
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	4.76 mL	23.78 mL	47.57 mL
5 mM	0.95 mL	4.76 mL	9.51 mL
10 mM	0.48 mL	2.38 mL	4.76 mL
50 mM	0.10 mL	0.48 mL	0.95 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

- Arora R, Schmitt D, Karanam B, Tan M, Yates C, Dean-Colomb W. Inhibition of the Warburg effect with a natural compound reveals a novel measurement for determining the metastatic potential of breast cancers. *Oncotarget*. 2015 Jan 20;6(2):662-78. doi: 10.18632/oncotarget.2689. PMID: 25575825; PMCID: PMC4359247.
- Erkel G, Anke T, Sterner O. Inhibition of NF-kappa B activation by panepoxydone. *Biochem Biophys Res Commun*. 1996 Sep 4;226(1):214-21. doi: 10.1006/bbrc.1996.1335. PMID: 8806616.

In vivo study

TBD

7. Bioactivity

Biological target:

Panepoxydone is a fungal metabolite that inhibits NF-κB transcription factor by preventing IκB phosphorylation, thus inhibiting the release of NF-κB from the IκB : NF-κB complex and its translocation into the nucleus.

In vitro activity

Product data sheet



Panepoxydone (PP), a natural NF- κ B inhibitor, significantly reduces the oxygen consumption and lactate production of MCF-7 and triple negative (MDA-MB-231, MDA-MB-468 and MDA-MB-453) breast cancer cells. This study further observed that PP inhibited mitochondrial membrane potential and the ATP synthesis using flow cytometry. PP also up-regulated LDH-B and down-regulated LDH-A expression levels in all breast cancer cells to similar levels observed in HMEC cells.

Reference: Oncotarget. 2015 Jan 20;6(2):662-78. <https://pubmed.ncbi.nlm.nih.gov/25575825/>

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.