Product data sheet

MedKoo

MedKoo Cat#: 318600	
Name: Quinestrol	
CAS#: 152-43-2	
Chemical Formula: $C_{25}H_{32}O_2$	
Exact Mass: 364.24023	
Molecular Weight: 364.52	
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:

Quinestrol is synthetic estrogen used in hormone replacement therapy. It is occasionally used for breast cancer and prostate cancer treatment.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with coqnpies 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	30	82.30
Ethanol	20	54.87

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.74 mL	13.72 mL	27.43 mL
5 mM	0.55 mL	2.74 mL	5.49 mL
10 mM	0.27 mL	1.37 mL	2.74 mL
50 mM	0.05 mL	0.27 mL	0.55 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. Llanos MA, Alberca LN, Ruiz MD, Sbaraglini ML, Miranda C, Pino-Martinez A, Fraccaroli L, Carrillo C, Alba Soto CD, Gavernet L, Talevi A. A combined ligand and target-based virtual screening strategy to repurpose drugs as putrescine uptake inhibitors with trypanocidal activity. J Comput Aided Mol Des. 2023 Feb;37(2):75-90. doi: 10.1007/s10822-022-00491-0. Epub 2022 Dec 10. PMID: 36494599.
2. Hashimoto M, Inoue S, Muramatsu M, Masliah E. Estrogens stimulate tamoxifen-induced neuronal cell apoptosis in vitro: a possible nongenomic action. Biochem Biophys Res Commun. 1997 Nov 17;240(2):464-70. doi: 10.1006/bbrc.1997.7681. PMID: 9388502.

In vivo study

1. Sidhu A, Singla N. Antifertility effects of quinestrol in male lesser bandicoot rat, Bandicota bengalensis, and potential in managing rodent population under field conditions. Integr Zool. 2023 May 25. doi: 10.1111/1749-4877.12733. Epub ahead of print. PMID: 37231968. Shg
2. Kang Y, Tan Y, Wang C, Yao B, An K, Liu M, Su J. Antifertility effects of levonorgestrel, quinestrol, and their mixture (EP-1) on plateau zokor in the Qinghai-Tibetan Plateau. Integr Zool. 2022 Nov;17(6):1002-1016. doi: 10.1111/1749-4877.12642. Epub 2022 Mar 31. PMID: 35271766.

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7. Bioactivity

Biological target:

Quinestrol is absorbed via the lymphatic system, then stored in adipose tissue, and is gradually released from adipose tissue.

In vitro activity

Quinestrol was selected for in vitro testing and demonstrated inhibited putrescine uptake in biochemical assay. Furthermore, all the confirmed hits proved to inhibit epimastigote proliferation. Quinestrol was able to inhibit, in the low micromolar range, the viability of trypomastigotes and the intracellular growth of amastigotes.These findings are being used to investigate the potential drug repurposing of quinestrol in treating Chagas disease.

Reference: J Comput Aided Mol Des. 2023 Feb;37(2):75-90. https://pubmed.ncbi.nlm.nih.gov/36494599/

In vivo activity

This study demonstrated that quinestrol has an inhibitory effect on a range of reproductive parameters in the plateau zokors, an Asiatic burrowing rodent. Further assessment is required to determine the effects on breeding and recruitment in enclosure or field experiments.

Reference: Integr Zool. 2022 Nov;17(6):1002-1016. https://pubmed.ncbi.nlm.nih.gov/35271766/

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.