

Product data sheet



MedKoo Cat#: 464412 Name: Gestodene-d6 CAS: 1542211-40-4 Chemical Formula: C ₂₁ H ₂₀ D ₆ O ₂ Exact Mass: 316.2309 Molecular Weight: 316.4736	
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:

Gestodene-d6 is intended for use as an internal standard for the quantification of gestodene by GC- or LC-MS. Gestodene is a progestin. It selectively binds to the progesterone receptor over the estrogen receptor. Gestodene induces transcriptional activity mediated by the progesterone receptor, and, weakly, the androgen receptor in reporter assays. It increases the growth of MCF-7 cells when used at concentrations ranging from 0.1 to 1 μM. In contrast, gestodene (0.1 mg/kg) reduces tumor growth in an estrogen-dependent model of rat mammary tumors induced by DMBA. Formulations containing gestodene, in combination with ethynyl estradiol have been used as oral contraceptives.

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	3.16 mL	15.80 mL	31.60 mL
5 mM	0.63 mL	3.16 mL	6.32 mL
10 mM	0.32 mL	1.58 mL	3.16 mL
50 mM	0.06 mL	0.32 mL	0.63 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. Catherino WH, Jeng MH, Jordan VC. Norgestrel and gestodene stimulate breast cancer cell growth through an oestrogen receptor mediated mechanism. *Br J Cancer*. 1993 May;67(5):945-52. doi: 10.1038/bjc.1993.175. PMID: 8494728; PMCID: PMC1968434.

In vivo study

TBD

7. Bioactivity

Biological target:

Gestodene-d6 (SHB 331-d6) is the deuterium labeled Gestodene. Gestodene(SHB 331) is a progestogen hormonal contraceptive.

In vitro activity

These studies suggest that the 19-norprogesterone norgestrel and gestodene stimulate MCF-7 breast cancer cell growth by activating the oestrogen receptor.

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Reference: Br J Cancer. 1993 May;67(5):945-52. <https://pubmed.ncbi.nlm.nih.gov/8494728/>

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.