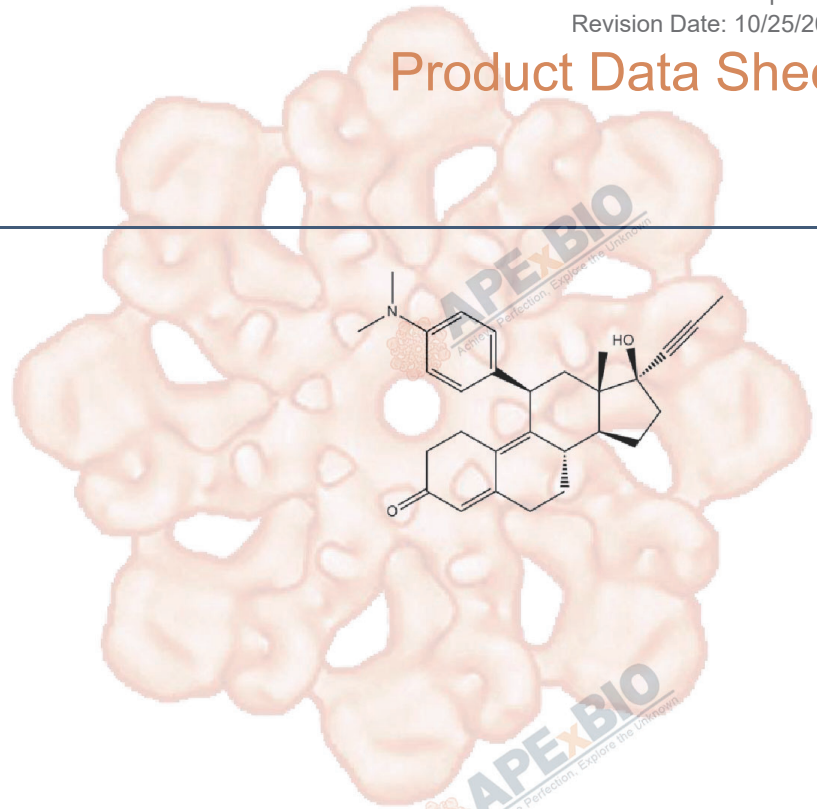


Product Data Sheet

Mifepristone

| | |
|------------------|---|
| Cat. No.: | B1511 |
| CAS No.: | 84371-65-3 |
| Formula: | C ₂₉ H ₃₅ NO ₂ |
| M.Wt: | 429.59 |
| Synonyms: | |
| Target: | GPCR/G protein |
| Pathway: | Glucocorticoid Receptor |
| Storage: | Store at -20°C |



Solvent & Solubility

≥21.4795 mg/mL in DMSO, ≥21.45 mg/mL in EtOH with gentle warming, insoluble in H₂O

| In Vitro | Preparing Stock Solutions | Mass | | | |
|----------|---------------------------|-----------------------|-----------|------------|------------|
| | | Solvent Concentration | 1mg | 5mg | 10mg |
| | | 1 mM | 2.3278 mL | 11.6390 mL | 23.2780 mL |
| | | 5 mM | 0.4656 mL | 2.3278 mL | 4.6556 mL |
| | | 10 mM | 0.2328 mL | 1.1639 mL | 2.3278 mL |

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

| | | |
|---------------------------|----------------------------------|--|
| Shortsummary | Progesterone receptor antagonist | |
| IC ₅₀ & Target | | |
| In Vitro | Cell Viability Assay | |
| | Cell Line: | Sperm; ovarian cancer cell lines(SK-OV-3, Caov-3, IGROV-1, and OV2008 cells) |
| | Preparation method: | The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months. |
| | Reacting conditions: | 0.04, 0.4, 4 and 40 μM for 1 h; or 20 μM for 1-3 days |

| | | |
|---------|--------------------------|--|
| | Applications: | Mifepristone modulated human sperm functions and dose-dependently inhibited progesterone-induced acrosome reaction, hyperactivation and $[Ca^{2+}]_i$ in human spermatozoa [2]. Moreover, mifepristone suppressed cell growth and decreased the expression of the S phase cyclin (cyclin A) and the M phase cyclin (cyclin B1) in various ovarian cancer cell lines [3]. |
| In Vivo | Animal experiment | |
| | Animal models: | SK-OV-3 tumor xenografts model |
| | Dosage form: | 0.5, 1.0 mg/d, s.c., for 40 days |
| | Applications: | Mifepristone (0.5, 1.0 mg/d) dose-dependently inhibited SK-OV-3 tumors growth in nude mice [3]. |
| | Other notes: | Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal. |

Product Citations

1. Martin LF, Richardson LS, et al.

"Dexamethasone induces primary amnion epithelial cell senescence through telomere-P21 associated pathway?." Biol Reprod. 2019 Jun 1;100(6):1605-1616.PMID:30927408

2. Li Q, Deng Q, et al. "Linking prostate cancer cell AR heterogeneity to distinct castration and enzalutamide responses." Nat Commun. 2018 Sep 6;9(1):3600.PMID:30190514

3. Shewade LH, Schneider KA, et al. "In-vivo regulation of Krüppel-like factor 9 by corticosteroids and their receptors across tissues in tadpoles of *Xenopus tropicalis*." Gen Comp Endocrinol. 2017 Feb 20. pii: S0016-6480(16)30412-9.PMID:28232027

See more customer validations on www.apexbt.com.

References

1. Jiang, W., Allan, G., Fiordeliso, J. J., Linton, O., Tannenbaum, P., Xu, J., Zhu, P., Gunnet, J., Demarest, K., Lundeen, S. and Sui, Z. (2006) New progesterone receptor antagonists: phosphorus-containing 11beta-aryl-substituted steroids. Bioorg Med Chem. 14, 6726-6732

2. Ko, J. K., Huang, V. W., Li, R. H., Yeung, W. S., Ho, P. C. and Chiu, P. C. (2014) An in vitro study of the effect of mifepristone and ulipristal acetate on human sperm functions. Andrology. 2, 868-874

3. Goyeneche, A. A., Caron, R. W. and Telleria, C. M. (2007) Mifepristone inhibits ovarian cancer cell growth in vitro and in vivo. Clin Cancer Res. 13, 3370-3379

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage

temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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