

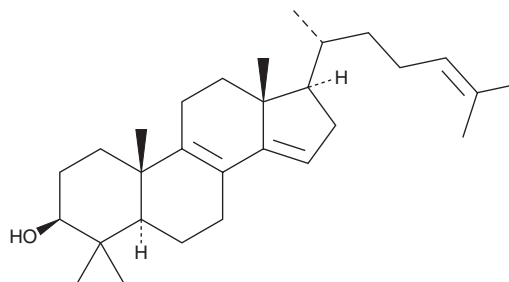
# PRODUCT INFORMATION



## FF-MAS

Item No. 26093

**CAS Registry No.:** 64284-64-6  
**Formal Name:** (3 $\beta$ ,5 $\alpha$ )-4,4-dimethyl-cholesta-8,14,24-trien-3-ol  
**Synonym:** Follicular Fluid Meiosis-activating Sterol  
**MF:** C<sub>29</sub>H<sub>46</sub>O  
**FW:** 410.7  
**Purity:**  $\geq$ 90%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Follicular fluid meiosis-activating sterol (FF-MAS) is supplied as a solid. A stock solution may be made by dissolving the FF-MAS in the solvent of choice, which should be purged with an inert gas. FF-MAS is slightly soluble in chloroform.

### Description

FF-MAS is an intermediate in cholesterol biosynthesis from lanosterol (Item No. 19521) that is found at high concentrations in mammalian ovarian follicular fluid.<sup>1</sup> It increases survival of human oocytes isolated from patients with polycystic ovarian syndrome (PCOS) and improves cytoplasmic maturation of immature rodent and porcine oocytes *in vitro*.<sup>2</sup> FF-MAS promotes completion of meiotic maturation to metaphase II and increases the rate of successful *in vitro* fertilization (IVF) in isolated mouse oocytes.<sup>3</sup> Formulations containing FF-MAS have been used to improve embryo quality and implantation rate during IVF.

### References

1. Bergh, C., Loft, A., Lundin, K., *et al.* Chromosomal abnormality rate in human pre-embryos derived from *in vitro* fertilization cycles cultured in the presence of Follicular-Fluid Meiosis Activating Sterol (FF-MAS). *Hum. Reprod.* **19(9)**, 2109-2117 (2004).
2. Faerge, I., Strejcek, F., Laurincik, J., *et al.* The effect of FF-MAS on porcine cumulus-oocyte complex maturation, fertilization and pronucleus formation *in vitro*. *Zygote* **14(3)**, 189-199 (2006).
3. Marín Bivens, C.L., Lindenthal, B., O'Brien, M.J., *et al.* A synthetic analogue of meiosis-activating sterol (FF-MAS) is a potent agonist promoting meiotic maturation and preimplantation development of mouse oocytes maturing *in vitro*. *Hum. Reprod.* **19(10)**, 2340-2344 (2004).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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