

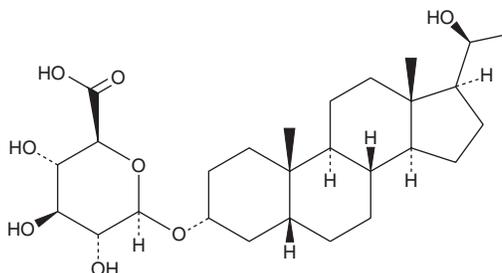
PRODUCT INFORMATION



Pregnanediol-3-Glucuronide

Item No. 26714

CAS Registry No.: 1852-49-9
Formal Name: (3 α ,5 β ,20S)-20-hydroxypregnan-3-yl ,
 β -D-glucopyranosiduronic acid
Synonyms: Pregnanediol-3 α -Glucuronide,
Pregnanediol 3 α -O- β -D-Glucuronide,
5 β -Pregnane-3 α ,20 α -diol Glucuronide
MF: C₂₇H₄₄O₈
FW: 496.6
Purity: \geq 95%
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

Pregnanediol-3-glucuronide is supplied as a solid. A stock solution may be made by dissolving the pregnanediol-3-glucuronide in the solvent of choice, which should be purged with an inert gas. Pregnanediol-3-glucuronide is soluble in the organic solvent ethanol at a concentration of approximately 20 mg/ml.

Description

Pregnanediol-3-glucuronide (PDG) is the primary urinary metabolite of the steroid hormone progesterone (Item No. 15876).¹ Levels of PDG in the urine correlate to levels of progesterone measured in the serum.^{1,2} Analysis of urinary PDG has been used to detect ovulatory and anovulatory menstrual cycles in women as well as to assess the fertility of ovulatory cycles.^{3,4}

References

1. O'Connor, K.A., Brindle, E., Holman, D.J., *et al.* Urinary estrone conjugate and pregnanediol 3-glucuronide enzyme immunoassays for population research. *Clin. Chem.* **49(7)**, 1139-1148 (2003).
2. Munro, C.J., Stabenfeldt, G.H., Cragun, J.R., *et al.* Relationship of serum estradiol and progesterone concentrations to the excretion profiles of their major urinary metabolites as measured by enzyme immunoassay and radioimmunoassay. *Clin. Chem.* **37(6)**, 838-844 (1991).
3. Kassam, A., Overstreet, J.W., Snow-Harter, C., *et al.* Identification of anovulation and transient luteal function using a urinary pregnanediol-3-glucuronide ratio algorithm. *Environ. Health Perspect.* **104(4)**, 408-413 (1996).
4. Blackwell, L.F., Cooke, D.G., and Brown, S. The use of estrone-3-glucuronide and pregnanediol-3-glucuronide excretion rates to navigate the continuum of ovarian activity. *Front. Public Health* **6:153**, (2018).

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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