**PRODUCT INFORMATION**

**Prostaglandin F$_{2\beta}$ MaxSpec® Standard**

**Item No. 10007232**

**CAS Registry No.:** 4510-16-1

**Formal Name:** $9\beta,11\alpha,15S$-trihydroxy-prosta-5Z,13E-dien-1-oic acid

**Synonyms:** $9\beta$-PGF$_{2\alpha}$, PGF$_{2\beta}$

**MF:** C$_{20}$H$_{34}$O$_5$

**FW:** 354.5

**Purity:** ≥95%

**Supplied as:** A solution in ethanol; in a deactivated glass ampule

**Concentration:** 100 µg/ml (nominal); see certificate of analysis for verified concentration

**Storage:** -20°C

**Stability:** ≥3 years; Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.

**Special Conditions:** Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.

**Description**

Prostaglandin F$_{2\beta}$ (PGF$_{2\beta}$) is the $9\beta$-hydroxy stereoisomer of PGF$_{2\alpha}$ (Item Nos. 16010 | 10007221). It is much less active than PGF$_{2\alpha}$ in antifertility and bronchoconstrictor activities.$^{1-3}$ PGF$_{2\beta}$ exhibits bronchodilating activity in guinea pigs and cats and antagonizes the bronchoconstrictor activity of PGF$_{2\alpha}$.$^3$

PGF$_{2\beta}$ MaxSpec® standard is a quantitative grade standard of PGF$_{2\beta}$ (Item No. 16410) that has been prepared specifically for mass spectrometry or any application where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. This PGF$_{2\beta}$ MaxSpec® standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product.

**Note:** The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.

**References**