

Native Equine Pregnant Mare Serum Gonadotropin

Cat. No. NATE-0969

Lot. No. (See product label)

Introduction

Description

Equine chorionic gonadotropin (eCG) is a gonadotropic hormone produced in the chorion of pregnant mares. Most commonly called pregnant mare's serum gonadotropin (PMSG) in the past, the hormone is commonly used in concert with progestogen to induce ovulation in livestock prior to artificial insemination. Pregnant mares secrete the hormone from their endometrial cups between 40 and 130 days in to their gestation, and once collected, it has been used to artificially induce estrus in female sheep, goats, cattle, and swine. Despite being less pure than pituitary extracts from sheep, goats or swine, PMSG tends to be used because of its longer circulatory half-life. PMSG is marked by the fact that it produces both follicle-stimulating hormone (FSH) and luteinizing hormone (LH). Equine CG, like all glycoprotein hormones, is composed of two dissimilar subunits named alpha and beta. The alpha subunit is common to all glycoprotein hormones (LH, FSH, TSH, CG). The beta subunit is specific and is responsible for receptor binding specificity. Nevertheless, in the equidae (horses, donkeys, zebras), the placental CGs also have the same beta subunit as the pituitary LHs. Consequently, in these species CGs differ from LHs only by their carbohydrate side-chains (particularly in their respective beta subunits).

Applications

Diagnostic Controls, Calibrators & Standards; Testing/Assay Validation; Life Science; Manufacturing; ELISA; Blotting

Synonyms

Pregnant Mare Serum Gonadotropin; PMSG; Equine chorionic gonadotropin; Ecg

Product Information

Species

Equine

Source

Equine Serum

Form

Lyophilized

EC Number

232-663-9

CAS No.

9002-70-4

Activity

> 1,000 IU/mg powder

Buffer

1 mg/mL is deionized water. Further dilutions should be in a buffer such as tris buffered saline with 1% BSA as a carrier.

Storage and Shipping Information

Storage

2-8°C

Stability

2 years