

## DEV9933 Estrone-3-Sulfate equine ELISA

The Estrone-3-Sulfate equine is a competitive enzyme immunoassay for the quantitative measurement of estrone-3-sulfate in mare serum.

Technology	: ELISA
Kit size	: 96
Sample material	: equine serum
Sample preparation	: -
Sample volume	: 20µl
Standard range	: 5-1000 ng/ml
Incubation	: 1h (shaking), 30min (shaking), 30min at RT
Measuring system	: TMB 450nm
Sensitivity	: 0.14 ng/ml

### Special remarks:

Estrone-3-Sulfate (E3S) is the predominant conjugated estrogen during pregnancy. It is produced by the fetus, possibly in association with the endometrium in the pregnant mare.

Different hormones are important for the complex events that occur during pregnancy in all mammals. In the mare these events include the maintenance of the corpus luteum function, formation of endometrial cups and development of secondary corpora lutea. Progesterone and PMSG (Pregnant Mare Serum Gonadotropine, eCG) and also free Estrogens, e.g. Estrone, are associated with these processes. It has been shown, that Estrone is rapidly conjugated after secretion and the ratio between conjugated and unconjugated estrogens is 100:1 in mare serum.

The conjugated estrogens, especially Estrone-3-sulfate, provide the opportunity to improve the accuracy of pregnancy diagnosis, to monitor the pregnancy and to distinguish whether the fetal development is normal or impaired. The diagnosis of embryonic death is usually made by using techniques of palpation of the uterus per rectum or ultrasound echography. The determination of Estrone-3-sulfate is an aid in the non-invasive diagnosis which allows a monitoring of the feto-placental unit during pregnancy. Only in mares with normal fetal

development the values of Estrone-3-sulfate show a tremendous increase between day 75 and 100 of gestation.

**PLEASE NOTE:** According to the respective ELISA an **Estrone-3-Sulfate equine Control (Cat.-No. DEV9933C)** is available and can be used for internal quality control.

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