

## Anti-17ß estradiol [17E12E5] Standard Size Ab00487-10.7

This antibody is in our proprietary AbFab2<sup>™</sup> recombinant F(ab2) format - based on Human IgG1 sequence with a short dimerization domain to improve stability and a his tag.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human F(ab)2, AbFab2<sup>™</sup> His-Tagged, Kappa
Clone Number: 17E12E5
Alternative Name(s) of Target: 17-beta-estradiol; E2; ethynyl estradiol; oestradiol
UniProt Accession Number of Target Protein:
Published Application(s): IP, RIA, WB, ELISA
Published Species Reactivity: n/a
Immunogen: estradiol-6-ethyl methoxy carbonyl (EMC)-bovine serum albumin (BSA).
Specificity: The antibody binds to 17ß estradiol with an ED50 of 76 pg/ml.

**Application Notes:** The antibody binds specifically to  $17\beta$ -estradiol, a mammalian estrogenic steroid hormone which is produced in the ovaries, placenta and testis. In women, the hormone plays an important role in the development of secondary sexual characteristics and maturation of long bones. The hormone is also responsible for the activation of certain oncogenes, and can be involved in the development of breast cancer and cancer of the uterine lining. Anti-estradiol antibodies can be useful in the detection of hormone concentrations in serum samples. This can be used therapeutically to monitor follicular maturation in cases of female infertility, and estradiol secreting tumours.

**Antibody First Published in:** Bettsworth F, Monnet C, Watelet B, Battail-Poirot N, Gilquin B, Jolivet M, Menez A, Arnaud M, Ducancel F. Functional characterization of two anti-estradiol antibodies as deduced from modelling and site-directed mutagenesis experiments. J Mol Recognit. 2001 Mar-Apr;14(2):99-109. PMID:11301480

**Note on publication:** Describes the role of monoclonal antibodies in measuring concentrations of steroid hormones in human serum samples, and the characterization of two anti-estradiol monoclonal antibodies for this use.

## **Product Form**

Size:

200  $\mu$ g Purified antibody.

**Purification:** Purified by Immobilized Metal Affinity Chromatography

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at - 20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.