

**Anti Estradiol-17-beta  
Mouse Monoclonal Antibody**Subclass: IgG<sub>1</sub>/k

PRODUCT NO.	<b>HYB 057-02</b>
PRESENTATION	Preparation: Protein-A/G purified Content: 1 mL, 1 mg/mL Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15mM sodium azide Storage: In the dark at 4-8°C
ANTIGEN	Biologically active oestrogen, estradiol-17beta, is an important sex hormone, but also makes an important contribution to the high concentrations of oestrogens which are present in malignant breast tissues.
IMMUNOGEN	Estradiol-17b-6-CMO coupled to BSA
SPECIFICITY	HYB 057-02 reacts with estradiol-17beta. No crossreactivity is seen with estrone, esriol, estrone sulphate, 16-ketoestradiol, 2-hydroxyestradiol, progesterone, androstenedione, testosterone, or cortisol when measuring on tritium-labeled steroids in radioimmunoassay.
EPI TOPE SPECIFICITY	Epitope specific for the hormone, no reactivity to the CMO linker
REACTIVITY	HYB 057-02 reacts specifically with estradiol-17beta with a measured Ka of 3x10E9 in a radioimmunoassay. HYB 057-02 can be cleaved with papain and reduced to generate Fab fragments with a Ka of 13.4x10E9 (1).
CULTURE MEDIUM	RPMI 1640 with 10% fetal calf serum
FUSION PARTNER	X63-Ag8.653.
IMMUNIZATION	Female CF1 x BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH) <sub>3</sub>
APPLICATION	

Method	Usability	Dilution guideline	References
ELISA	Yes	1:1500	
Immunoblotting	Not determined		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 0.1-1 µg/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES	<ol style="list-style-type: none"> <li>Pajunen M, Saviranta P, Jauria P, Karp M, Petterson K, Mantsala P, Lovgren T (1997) Cloning, sequencing, expression and characterization of three anti-estradiol-17b Fab fragments. <i>Biochim Biophys Acta</i> 1351:192-202.</li> <li>Lamminmaki U, Villoutreix BO, Jauria P, Saviranta P, Vihinen M, Nilsson L, Teleman O, Lovgren T (1997) Structural analysis of an anti-estradiol antibody. <i>Mol Immunol</i> 34:1215-1226.</li> <li>Saviranta P, Jauria P, Lamminmaki U, Hellman J, Eriksson S, Lovgren T (2000) N-terminal mutations in the anti-estradiol Fab 57-2 modify its hapten binding properties. <i>Protein Sci</i> 9:2547-56.</li> <li>Lamminmaki U, Kankare JA (2001) Crystal structure of a recombinant anti-estradiol Fab fragment in complex with 17b-estradiol. <i>J Biol Chem</i> 276:36687-94.</li> <li>McEwen BS, Davis PG, Parsons B, Pfaff DW (1979) The brain as a target for steroid hormone action. <i>Annu Rev Neurosci</i> 2:65-112.</li> <li>Jorgensen L, Brunner N, Spang-Thomsen M, James MR, Clarke R, Dombernowsky P, Svenstrup B (1997) Steroid metabolism in the hormone dependent MCF-7 human breast carcinoma cell line and its two hormone resistant subpopulations MCF-7/LCC1 and MCF-7/LCC2. <i>J Steroid Biochem Mol Biol</i> 63:275-281.</li> </ol>
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**CONDITIONS**

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.