

## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# Rabbit anti-Estrogen Receptor (ER) antibody

Catalog No.	= Isotype:	<b>Speceis:</b>	<b>Accession No:</b>	
130-10008	Rabbit Ig G	Human	P03372	

# **Description**

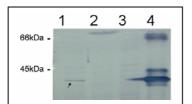
Estrogen Receptor (ER) refers to a group of receptors that are activated by the hormone  $17\beta$ -estradiol. Two types of estrogen receptor exist: ER, which is a member of the nuclear hormone family of intracellular receptors, and the estrogen G protein-coupled receptor GPR30 (GPER), which is a G protein-coupled receptor. Recent studies have revealed the existence of two distinct estrogen receptors in our bodies: ER $\alpha$  and ER $\beta$ . While they both bind estrogen as well as other agonists and antagonists, the two receptors have distinctly different localizations and concentrations within our body. Structural differences also exist between the two.

# **Applications**

Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:32000(at least detecting 32ng/ml)
Western Blotting	*			1:1000-5000(at least)
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.



Immunodetection Analysis: Lane 1.cell lysate MCF-7; Lane 2. cell lysate A431; Lane 3. cell lysate 293T; Lane 4. positive control, ER protein. The membrane blot was probed with anti-ER primary antibody (0.2µg/ml). The binding bands were visualized using AP-conjugated goat anti-rabbit secondary antibody and then adding NBT/BCIP substrate. Arrows indicate ER in tested cell lysates (about 40 kDa).

The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.



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## Preparation

Immunogen was recombinant protein expressed in *E. coli and further* purified by affinity column. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation, and followed by Protein A/G affinity chromatography.

# Specificity

The rabbit anti-human Estrogen Receptor antibody specifically detected target derived from human recombinant protein as well as selected cell lysates (See image above). Cross reactivity with mouse and rat ER was not tested yet.

#### Reconstitution

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. *It final concentration is indicated in shipping vial*. **Please avoid freeze-thaw cycles**.

The antibody is stable for at least years from the data of receipt when stored at  $-20^{\circ}$ C to  $-70^{\circ}$ C. Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at  $-20^{\circ}$ C to  $-70^{\circ}$ C in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can be stored at  $4^{\circ}$ C for 1 month.

# Storage

Store at -20°C, if not intended for use within a month, Keep it at 4°C and *minimize freezing and thawing when use*.

# Related products

- 1. Estrogen receptor Protein(Cat#RB-14-0004P-1)
- 2. Recombinant Human Estrogen Receptor alpha (Cat# 228-10408-1)

#### Reference

- 1. Kansra S, Yamagata S, Sneade L, Foster L, Ben-Jonathan N (2005). "Differential effects of estrogen receptor antagonists on pituitary lactotroph proliferation and prolactin release". Mol. Cell. Endocrinol. 239 (1-2): 27-36.
- 2. Fabian CJ, Kimler BF (2005). "Selective estrogen-receptor modulators for primary prevention of breast cancer". J. Clin. Oncol. 23 (8): 1644–55.
- 3. Deroo BJ, Korach KS (2006). "Estrogen receptors and human disease". J. Clin. Invest. 116 (3): 561–70

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