

**Rabbit Anti-ER [MD4R]:RM0247**

**Intended Use:** For Research Use Only

**Description:** Estrogen Receptor Alpha (ER or ER Alpha) is a nuclear protein and member of the steroid hormone receptor family. ER alpha possesses both DNA binding and ligand binding domains, and exerts a significant role in activating the transcription of certain genes. Ligand-dependent dimerization and phosphorylation both function to regulate the transcriptional activation of ER alpha.

**Specifications:**

Clone: MD4R  
Source: Rabbit  
Isotype: IgG  
Reactivity: Human  
Localization: Nucleus  
Formulation: Antibody in PBS pH7.4, containing BSA, glycerol, and ≤0.09% sodium azide (NaN<sub>3</sub>).  
Storage: Store at 2°- 8°C.  
Applications: IHC  
Package:

Description	Catalog No.	Size
ER Concentrated	RM0247	1 ml

**IHC Procedure\*:**

Positive Control Tissue: Breast cancer  
Concentrated Dilution: 50-200  
Pretreatment: Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. Membrane estrogen receptor alpha is an important modulator of bone marrow C-Kit+ cells mediated cardiac repair after myocardial infarction. Su F, et al. Int J Clin Exp Pathol. May 1;8(5):4284-95, 2015.
2. Estrogen receptor alpha gene expression in breast cancer tissues from the Iranian population--a pilot study. Hosseini A, et al. Asian Pac J Cancer Prev. 15(20):8789-91, 2014.
3. Significance of the progesterone receptor and epidermal growth factor receptor, but not the estrogen receptor, in chemically induced lung carcinogenesis in female A/J mice. Kishi S, et al. Oncol Lett. Dec;8(6):2379-2386, 2014..
4. The prognostic value of estrogen receptor beta and proline-, glutamic acid- and leucine-rich protein 1 (PELP1) expression in ovarian cancer. Aust S, et al. BMC Cancer. Mar 14;13:115, 2013.
5. Loss of estrogen receptor beta expression correlates with shorter overall survival and lack of clinical response to chemotherapy in ovarian cancer patients. Halon A, et al. Anticancer Res. Feb;31(2):711-8, 2011.
6. Estrogen receptors beta and alpha have specific pro- and anti-nociceptive actions. Coulombe MA, et al. Neuroscience. Jun 16;184:172-82, 2011.

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Rev. A