

**Estrogen Receptor Ab-1 (Clone AER314)**

Mouse Monoclonal Antibody

**Cat. #MS-168-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml)** (Purified Ab with BSA and Azide)**Cat. #MS-168-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml)** (Purified Ab without BSA and Azide)**Cat. #MS-168-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 200µg/ml)** (Biotin-Labeled Ab with BSA and Azide)

Please note this data sheet has been changed effective December 6, 2011

**Description:** ER gene consists of more than 140kb of genomic DNA divided into 8 exons, being translated into a protein with six functionally discrete domains required for transcription activation function, binding to estrogen response element (ERE) constitutive dimerization, binding to heat shock proteins, and ligand recognition. The ER is an important regulator of growth and differentiation in the mammary gland. Presence of ER in breast tumors indicates an increased likelihood of response to anti-estrogen (e.g. tamoxifen) therapy

**Comments:** On chymotryptic cleavage of ER, Ab-1 recognizes only the undigested ER indicating that its epitope is dismembered by digestion.

**Mol. Wt. of Antigen:** 67kDa**Epitope:** aa 125-165**Species Reactivity:** Human, Cow, Rabbit, Mouse, and Rat. Others-not known.**Clone Designation:** AER314**Ig Isotype / Light Chain:** IgG<sub>1</sub> / λ**Immunogen:** Purified, SDS-denatured calf uterus estrogen receptor (ER).**Applications and Suggested Dilutions:**

- Affinity Purification<sup>1</sup>  
(For conjugation, order Ab without BSA)
- Gel Supershift<sup>1</sup> (Order Ab at 1mg/ml)
- Immunoprecipitation (Native and denatured)  
(Use Protein G)(Ab at 2µg/mg protein lysate)

The optimal dilution for a specific application should be determined by the investigator.

**Positive Control:** MCF-7 cells**Cellular Localization:** Nuclear**Supplied As:**

200µg/ml antibody purified from the ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

**Storage and Stability:**

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

**Key References:**

1. Abbondanza C *et. al.* Steroids, 1993, 58:4-12.

**Limitations and Warranty:**

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Lab Vision is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

**Material Safety Data:**

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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