Estrogen Receptor RMab Clone: EP1 Rabbit Monoclonal

Bio Science FOR THE WORLD

Inset: IHC of Estrogen Receptor on an FFPE Breast Carcinoma Tissue

Intended Use

Analyte Specific Reagent: analytical and performance characteristics are not established.

* The ER alpha antibody, clone EP1, has been manufactured using Epitomics RabMab[®] technology covered under Patent No.'s 5,675,063 and 7,402,409.

Immunogen

Recombinant protein of human estrogen receptor alpha corresponding to amino acids 1-300.

Summary and Explanation

Estrogen receptor alpha (ER) is a nuclear receptor for estrogens such as estradiol (the main endogenous human estrogen). The two different estrogen receptor proteins produced from the ESR1 and ESR2 genes are usually called the alpha and beta receptors.

This ER antibody recognizes a protein of 67 kDa, which is identified as estrogen receptor (ER) alpha.

Antibody Type	Rabbit Monoclonal	Clone	EP1
lsotype	IgG	Reactivity	Paraffin, Frozen
Localization	Nuclear	Control	Breast, Myometrium, Cervix, Fallopian Tube, Breast Carcinoma
Species Reactivity		Human	

Presentation

Estrogen receptor clone EP1 is a rabbit monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog Num.	Antibody Type	Dilution	Volume/Qty
BSB 2489	Tinto Prediluted	Ready-to-Use	3.0 mL
BSB 2490	Tinto Prediluted	Ready-to-Use	7.0 mL
BSB 2491	Tinto Prediluted	Ready-to-Use	15.0 mL
BSB 2492	Concentrated	1:50 - 1:200	0.1 mL
BSB 2493	Concentrated	1:50 - 1:200	0.5 mL
BSB 2494	Concentrated	1:50 - 1:200	1.0 mL
BSB 2495	Control Slides	Not Applicable	5 slides

Precautions

Presentations

For professional users only. Ensure results are interpreted by a medical professional.
This product contains sodium azide (NaN3), a toxic chemical which may react with plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent sodium azide build-up.

Ensure proper handling procedures are used with reagent. Always wear proper laboratory equipment such as laboratory coat and gloves when handling reagents.
Unused solution should be disposed of according to local and federal regulations.
Do not indext reagent. If reagent indexted contact a poison control center.

5. Do not ingest reagent. If reagent ingested, contact a poison control center immediately.

Storage

Store at 2-8 °C. Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

Specimen Preparation

Paraffin sections: The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation to ensure best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033) or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042). Frozen sections and cell preparations: The antibody can be used for labeling

acetone-fixed frozen sections and acetone-fixed cell preparations.

Staining Procedure

1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positive charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).

2. Air dry for 2 hours at 58° C.

3. Deparaffinize, dehydrate and rehydrate tissues.

4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).

5. Any of three heating methods may be used:

a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a Steamer, cover and steam for 30-60 minutes.

6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.

7. Wash slides with IHC wash buffer or DI water.

8. Continue IHC staining protocol.

Recommended IHC Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
Peroxidase/AP Blocker	5 min.	5 min.	5 min
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain	Varies	Varies	Varies

References

1. Dabbs DJ, et al. Diagnostic Immunohistochemistry. 2002

- 2. Kell DL, et al. Applied Immunohistochemistry. 1993;1(4):275-81
- 3. Leong ASY, et al. Applied Immunohistochemistry. 1993;1(4):282-288
- 4. Tesch M, et al. Am J Clin Pathol. 1993;99:8-12
- 5. Francesco AM, et al. Applied Immunohistochemistry. 1994;2(3):157-163
- 6. Silvio M, et al. Applied Immunohistochemistry. 1995;3(2):85-90
- 7. Bejar J, et al. Arch Pathol Lab Med. 1998; Apr; 122(4): 346-52

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a medical professional.