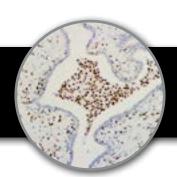
ERG, RMab Clone: EP111 Rabbit Monoclonal

C€ IVD





Inset: IHC of ERG on a FFPE Prostate Carcinoma Tissue

## **Intended Use**

For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

\* The ERG antibody, clone EP111, has been manufactured using Epitomics RabMab® technology covered under Patent No.'s 5,675,063 and 7,402,409.

### **Immunogen**

A synthetic peptide corresponding to residues on the C-terminus in human ERG protein.

# **Summary and Explanation**

ERG belongs to the ETS family that plays important roles in cell development, differentiation, proliferation, apoptosis and tissue remodeling. The aberrant expression of several ETS proteins is involved in tumor development and progression. ERG is linked to normal processes such as mesoderm formation. TMPRSS2-ERG fusion, which occurs on account of translocations and interstitial deletions, is implicated in aggressive forms of prostate cancer.

ERG overexpression is associated with aggressive tumor behavior and patient survival in prostate cancer. ERG antibody labels endothelial cells, lymophocytes, and prostate cancer cells.

Antibody Type	Rabbit Monoclonal	Clone	EP111
Isotype	IgG	Reactivity	Paraffin, Frozen
Localization	Nuclear	Control	Prostate, Colon, Kidney, Fallopian Tube, Tonsil, Myometrium, Skin, Brain, Breast
Species Reactivity		Human, Predicted: Mouse, Rat	

### **Presentation**

ERG 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.

#### **Presentations**

Catalog Num.	Antibody Type	Dilution	Volume/Qty
BSB 6737	Tinto Prediluted	Ready-to-Use	3.0 mL
BSB 6738	Tinto Prediluted	Ready-to-Use	7.0 mL
BSB 6739	Tinto Prediluted	Ready-to-Use	15.0 mL
BSB 6740	Concentrated	1:100 - 1:500	0.1 mL
BSB 6741	Concentrated	1:100 - 1:500	0.5 mL
BSB 6742	Concentrated	1:100 - 1:500	1.0 mL
BSB 6743	Control Slides	Not Applicable	5 slides

## **Precautions**

- **1.** For professional users only. Ensure results are interpreted by a medical professional.
- **2.** 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.
- **3.** Ensure proper handling procedures are used with reagent. Always wear proper laboratory equipment such as laboratory coat and gloves when handling reagents.
- **4.** Unused solution should be disposed of according to local and federal regulations.
- **5.** Do not ingest reagent. If reagent ingested, contact a poison control center immediately.
- **6.** For complete recommendations for handling biological specimens please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (6).

## 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. For manual staining, perform antibody incubation at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
- 8. Wash slides with IHC wash buffer or DI water.
- 9. 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

### **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.

### References

- 1. Reddy ES, et al. Proc Natl Acad Sci USA. 1987; 84:6131-5
- 2. Iwamoto M, et al. Dev Biol. 2007; 305:40-51
- 3. Fitzgerald LM, et al. BMC Cancer. 2008; 8:230
- 4. Mosquera JM, et al. Clin Cancer Res. 2008; 14:3380-5
- 5. Kumar-Sinha C, et al. Nat Rev Cancer. 2008; 8:497-511
- 6. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

## Symbol Key / Légende des symboles/Erläuterung der Symbole





