

**Rabbit Anti-ERG [EPR3864]: RM0094, RM0094RTU7**

**Intended Use:** For Research Use Only

**Description:** ERG, the ETS related gene, belongs to the ETS family that plays important roles in cell development, differentiation, proliferation, apoptosis and tissue remodeling. This family of transcription factors contains approximately 30 members that share a highly conserved DNA-binding domain (ETS domain) and differs from each other in other domains (such as absence or presence of the Pointed/SAM domain) and are thus distinguished in sub-families. The aberrant expression of several ETS proteins is involved in tumor development and progression. ERG belongs to the Erg/Fli-1 sub-family. Its involvement in human cancers has been widely studied. Interestingly, prostate cancers with TMPRSS2-ERG fusion have been found to have five morphological features: blue-tinged mucin, cribriform growth pattern, macronucleoli, intraductal tumor spread, and signet-ring cell features. ERG overexpression is associated with aggressive tumor behavior and patient survival in prostate cancer. The ERG antibody labels endothelial cells, lymphocytes and prostate cancer cells.

**Specifications:**

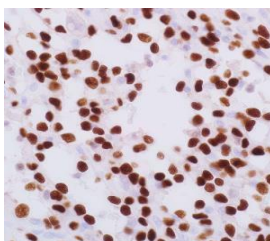
Clone: EPR3864 equivalent to EP111  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse, rat  
 Localization: Nucleus, cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, Flow Cyt., ICC/IF, WB  
 Package:

Description	Catalog No.	Size
ERG Concentrated	RM0094	1 ml
ERG Prediluted	RM0094RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Prostate cancer  
 Concentrated Dilution: 25-100  
 Pretreatment: EDTA pH8.0, 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.



FFPE human hepatic hemangioendothelioma stained with anti-ERG antibody using DAB

**References:**

1. Cancer Prognosis Defined by the Combined Analysis of 8q, PTEN and ERG. Silva MP, et al. Transl Oncol 9:575-582, 2016.
2. Inflammation-Induced Oxidative Stress Mediates Gene Fusion Formation in Prostate Cancer. Mani RS, et al. Cell Rep 17:2620-2631, 2016.
3. FOXO1 couples metabolic activity and growth state in the vascular endothelium. Wilhelm K, et al. Nature 529:216-20, 2016.
4. Divergent clonal evolution of castration-resistant neuroendocrine prostate cancer. Beltran H, et al. Nat Med 22:298-305, 2016.

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