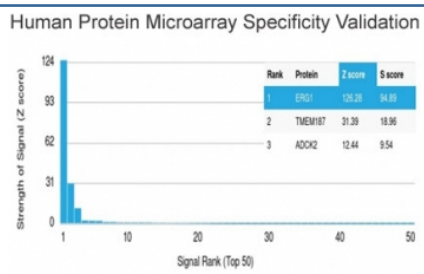
ERG Antibody / Endothelial and Prostate Cancer Marker Antibody [clone ERG/2107] (V8982)

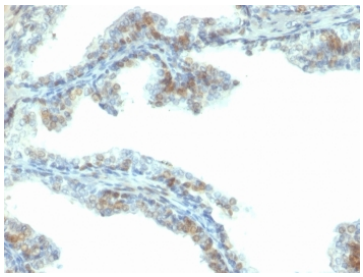
Catalog No.	Formulation	Size
V8982-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8982-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8982SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	ERG/2107
Purity	Protein A/G affinity
UniProt	P11308
Localization	Nucleus, cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This ERG Antibody / Endothelial and Prostate Cancer Marker Antibody is available for research use only.



ERG Antibody Microarray Validation. Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using ERG antibody (clone ERG/2107) demonstrates highly specific binding to ERG (ETS-related gene), with strong signal intensity and clear separation from non-target proteins. Z- and S-score metrics confirm target specificity, where the Z-score reflects signal strength relative to background and the S-score represents the relative specificity compared to the next highest-ranking proteins.



ERG Antibody Prostate Cancer Tissue IHC. Immunohistochemistry of FFPE human prostate carcinoma tissue using ERG antibody highlights strong HRP-DAB brown nuclear staining in tumor epithelial cells, consistent with ERG expression associated with TMPRSS2-ERG fusion-driven prostate cancer, with endothelial cells in surrounding vasculature also showing nuclear positivity; clone ERG/2107 was used for detection. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

ETS-related gene (ERG) is a member of the ETS family of transcription factors that regulate gene expression programs involved in vascular development, angiogenesis, and cellular differentiation. ERG is highly expressed in endothelial cells where it plays a central role in maintaining vascular integrity, regulating endothelial cell survival, and controlling genes associated with angiogenic signaling pathways. In normal physiology, ERG contributes to blood vessel stability and is a key regulator of endothelial identity across a wide range of tissues.

ERG antibody, also referred to as ETS-related gene antibody and ERG transcription factor antibody in the literature, recognizes a nuclear protein that is widely used as a marker of endothelial cells and vascular structures in tissue sections. ERG expression is typically localized to the nucleus, consistent with its role as a DNA-binding transcription factor, and this nuclear staining pattern is a defining feature in immunohistochemical analysis of vascular endothelium. In addition to vascular tissues, ERG is expressed in select hematopoietic cell populations, reflecting its broader role in lineage specification and transcriptional control. This antibody is part of a collection of Human Protein Microarray validated antibodies that have been screened for specificity across thousands of proteins.

This ERG Antibody / Endothelial and Prostate Cancer Marker Antibody (clone ERG/2107) is uniquely positioned for research involving both vascular biology and oncology, particularly in the context of prostate cancer. ERG is one of the most clinically relevant transcription factors in prostate cancer due to recurrent gene fusions, most commonly TMPRSS2-ERG, which drive aberrant ERG expression in tumor epithelial cells. These fusion events result in strong nuclear ERG staining in prostate carcinoma, making ERG a widely used biomarker for identifying prostate cancer and distinguishing it from benign or non-prostatic tissues. ERG expression in tumors is therefore a key indicator of oncogenic transcriptional reprogramming and disease progression.

In immunohistochemistry, ERG serves as a robust marker for endothelial cells, highlighting vascular networks within normal and tumor tissues, while also enabling detection of ERG-positive tumor nuclei in prostate cancer specimens. This dual utility supports studies of tumor angiogenesis, vascular remodeling, and cancer diagnostics. The clear nuclear localization of ERG staining provides strong contrast against surrounding stromal and epithelial compartments, facilitating accurate interpretation in complex tissue environments such as human tissue microarrays.

Microarray validation of clone ERG/2107 supports its specificity for the ERG protein, providing confidence in target recognition across diverse experimental settings. As a mouse monoclonal antibody, clone ERG/2107 offers consistent performance and reproducibility for detecting ERG expression in research applications. An ERG antibody is suitable for detecting ERG expression in vascular biology studies, cancer research, and tissue-based analyses where endothelial and tumor-associated expression patterns are of interest.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the ERG Antibody / Endothelial and Prostate Cancer Marker Antibody should be determined by the researcher.

Immunogen

Recombinant human full-length ERG protein was used as the immunogen for the ERG antibody.

Storage

Aliquot the ERG antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

ERG antibody, ETS-related gene antibody, ERG transcription factor antibody, ERG endothelial marker antibody, ERG prostate cancer marker antibody