abcam

ab196374

Alexa Fluor® 488 Anti-ERG antibody [EPR3864]

Anti-ERG antibody [EPR3864] - Alexa Fluor® 488 conjugated (ab196374) is a rabbit recombinant monoclonal antibody detecting ERG in **ICC/IF**. Suitable for **Human**.

- Clone EPR3864 is the most cited clone to ERG
- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR3864
Purification technique	Affinity purification Protein A
Dissociation constant	8.9×10^{-10} M
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	This product gave a positive signal in THP-1 cells fixed with 4% formaldehyde (10 min)

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information ERG

Function	Transcriptional regulator. May participate in transcriptional regulation through the recruitment of SETDB1 histone methyltransferase and subsequent modification of local chromatin structure.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

What is this antibody validated in?
Alexa Fluor® 488 Anti-ERG antibody [EPR3864] (ab196374) is a rabbit recombinant monoclonal antibody and is validated for use in Immunocytochemistry/immunofluorescence (ICC/IF) in Human samples.

Related products
Antibody clone EPR3864 is also available pre-conjugated to a variety of labels for your convenience – Anti-ERG Alexa Fluor® 488 [EPR3864] (ab196374).

Other related products
We have a range of other formats of antibody clone [EPR3864] also available for your convenience: ab92513, HRP - ab195514, Alexa Fluor® 647 - ab196149, Alexa Fluor® 488 - ab196374, ab214341, Carrier free - ab214796, Carrier free - ab275331, PE - ab314261, APC - ab315146

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	ERG or ETS-related gene is a transcription factor that belongs to the ETS (E-26 transformation specific) family. The ERG protein plays an important role in gene regulation involved in cell growth and differentiation. ERG has a molecular mass of approximately 54 kDa. It is expressed in a variety of tissues including the prostate endothelial cells and hematopoietic cells. Researchers often study ERG protein localization through techniques such as ERG IHC to better understand its expression across different tissues for example in the ERG color sections that highlight specific cellular contexts.
Biological function summary	ERG regulates processes critical for normal cellular functions such as proliferation apoptosis and differentiation. It functions as part of a larger transcriptional regulatory complex and interacts with other proteins to exert its effects on target genes. The ERG protein can affect angiogenesis and limb development through its regulation of vascular endothelial cells. By controlling such important cellular processes ERG influences both normal physiological functions and abnormal conditions when dysregulated.
Pathways	ERG is highly significant in the MAPK/ERK signaling pathway which is involved in cell division and survival. ERG interacts with other signaling proteins such as FLI1 and RUNX1 affecting cellular responses and contributing to the regulation of gene expression essential for development and homeostasis. Within the hematopoietic context ERG participates in the regulation of pathways that maintain stem cell populations making it important for normal blood cell development.
Associated diseases and disorders	ERG is prominently implicated in prostate cancer where gene fusions involving ERG lead to its overexpression and contribute to malignancy. The abnormal expression of ERG in endothelial cells can also have a role in vascular disorders. ERG's interplay with proteins like TMPRSS2 often seen in gene fusions in prostate cancer underlines its role in oncogenesis. Understanding how ERG regulates these pathways and its interactions with other proteins helps in developing targeted therapies for disorders involving ERG dysregulation.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

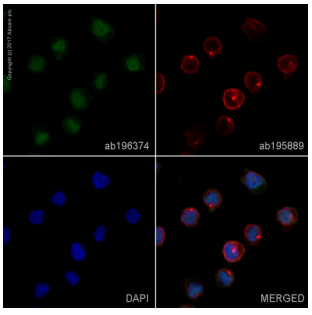
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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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1 product image



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-ERG antibody [EPR3864] (ab196374)

ERG Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ERG antibody

ab196374 staining ERG in THP-1 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab196374 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.