abcam

Product datasheet

Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) ab214341

Recombinant

2 References 6 Images

Overview

Product name	Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric)
Description	Mouse monoclonal [EPR3864] to ERG - Chimeric
Host species	Mouse
Tested applications	**Suitable for:** WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat whole cell lysate (**ab7899**). IHC-P: FFPE human prostate cancer.
General notes	This mouse monoclonal chimeric antibody has been engineered from a RabMAb parent antibody (**ab92513**). By necessity, some rabbit sequence is retained as part of the variable domain. When multiplexing with other rabbit-derived antibodies, using cross absorbed Fc-reactive secondary antibodies are recommended.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3864
Isotype	IgG2b
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab214341 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 55 kDa (predicted molecular weight: 55 kDa). **For unpurified use at 1µg/ml.**
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. This antibody may not be suitable for IHC with mouse or rat samples. See **IHC antigen retrieval protocol**.

Target

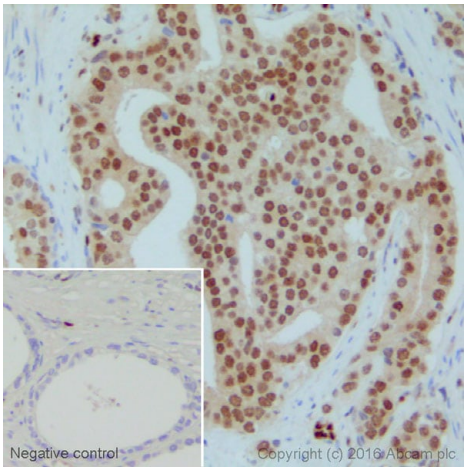
Function Transcriptional regulator. May participate in transcriptional regulation through the recruitment of SETDB1 histone methyltransferase and subsequent modification of local chromatin structure.

Involvement in disease Defects in ERG are a cause of Ewing sarcoma (ES) [MIM:612219]. A highly malignant, metastatic, primitive small round cell tumor of bone and soft tissue that affects children and adolescents. It belongs to the Ewing sarcoma family of tumors, a group of morphologically heterogeneous neoplasms that share the same cytogenetic features. They are considered neural tumors derived from cells of the neural crest. Ewing sarcoma represents the less differentiated form of the tumors. Note=A chromosomal aberration involving ERG is found in patients with Erwing sarcoma. Translocation t(21;22)(q22;q12) with EWSR1.
Note=Chromosomal aberrations involving ERG have been found in acute myeloid leukemia (AML). Translocation t(16;21)(p11;q22) with FUS. Translocation t(X;21)(q25-26;q22) with ELF4.

Sequence similarities Belongs to the ETS family.
Contains 1 ETS DNA-binding domain.
Contains 1 PNT (pointed) domain.

Cellular localization Nucleus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

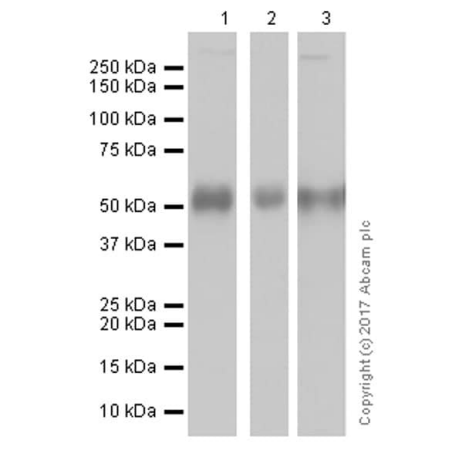
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341)

IHC image of ERG staining in a section of formalin fixed, paraffin embedded human prostate cancer. The section was pre-treated using pressure cooker heat mediated antigen retrieval with Tris-EDTA (pH9). The section was incubated with unpurified ab214341, 0.16 µg/ml, for 30 mins at room temperature followed by an incubation with a ready to use anti mouse HRP polymer system for 15 mins at room temperature. The section was counterstained with haematoxylin and mounted with permanent mounting media. As a negative control (inset) the same assay was performed on a section of formalin fixed, paraffin embedded, normal human prostate.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341)

All lanes : Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341) at 1/1000 dilution (purified)

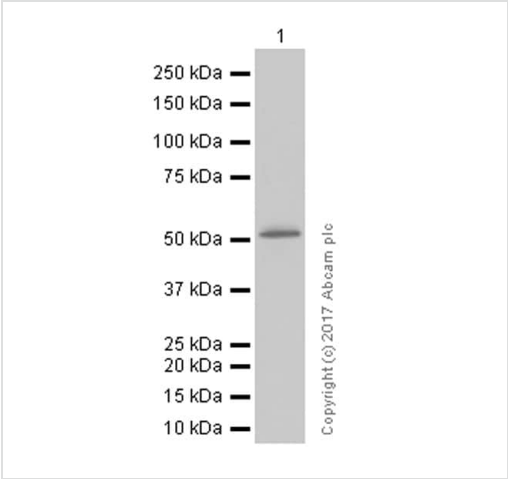
Lane 1 : Rat heart lysates
Lane 2 : Rat brain lysates
Lane 3 : Mouse brain lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Rabbit Anti-Mouse IgG H&L (HRP) (**ab6728**) at 1/2000 dilution

Predicted band size: 55 kDa
Observed band size: 55 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341)

Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341) at 1/5000 dilution (purified) + HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 15 µg

Secondary
Rabbit Anti-Mouse IgG H&L (HRP) (**ab6728**) at 1/2000 dilution

Predicted band size: 55 kDa
Observed band size: 55 kDa

Blocking and diluting buffer: 5% NFDM/TBST

Western blot - Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341)

Lane 1 : Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341) at 1 µg/ml (unpurified)
Lane 2 : Anti-ERG antibody [EPR3864] (**ab92513**) at 1 µg/ml (unpurified)

All lanes : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary
Lane 1 : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/5000 dilution
Lane 2 : Peroxidase AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/50000 dilution

Developed using the ECL technique.

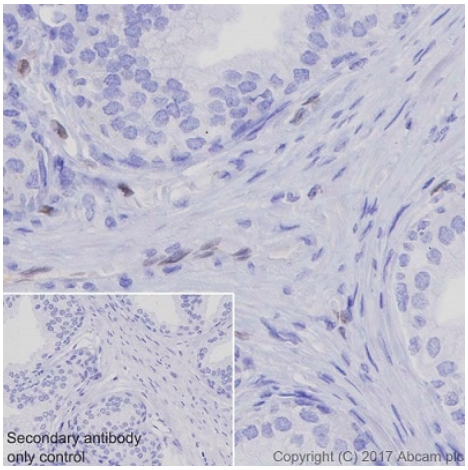
Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 55 kDa

Exposure time: 4 minutes

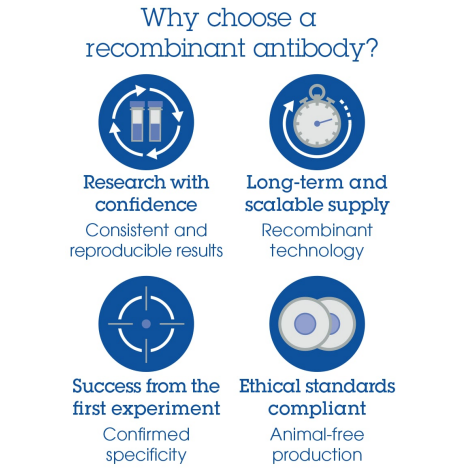
This blot was produced using a 4-12% Bis-tris gel under the MOPS

buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab214341 (lane 1) and **ab92513** (lane 2) overnight at 4°C. Antibody binding was detected using an anti-mouse (lane 1) and anti-rabbit (lane 2) antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human prostatic hyperplasia tissue sections labeling ERG with purified ab214341 at 1:1000 dilution (1.39 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341)



Anti-ERG antibody [EPR3864] - Mouse IgG2b (Chimeric) (ab214341)

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