

Product datasheet

Anti-ERG antibody [EPR3864] - BSA and Azide free ab214796

Recombinant RabMAb

8 Images

Overview

Product name	Anti-ERG antibody [EPR3864] - BSA and Azide free
Description	Rabbit monoclonal [EPR3864] to ERG - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, IHC-P, WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human ERG aa 450 to the C-terminus. The exact sequence is proprietary.
Positive control	WB: Jurkat cell lysate. IHC: Human prostate adenocarcinoma tissue.
General notes	Ab214796 is the carrier-free version of ab92513 . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab214796 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

Maxpar® is a trademark of Fluidigm Canada Inc.

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 production

For more information [see here](#).

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

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

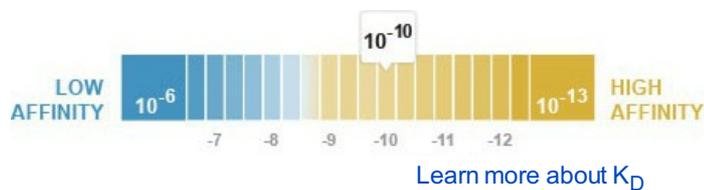
We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	K _D = 8.90 x 10 ⁻¹⁰ M



Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3864
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab214796** in the following tested applications.

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

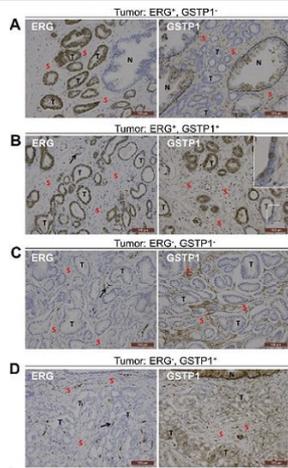
Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
WB		Use at an assay dependent concentration. Predicted molecular weight: 55 kDa.
ICC/IF		Use at an assay dependent concentration.

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]

- BSA and Azide free (ab214796)

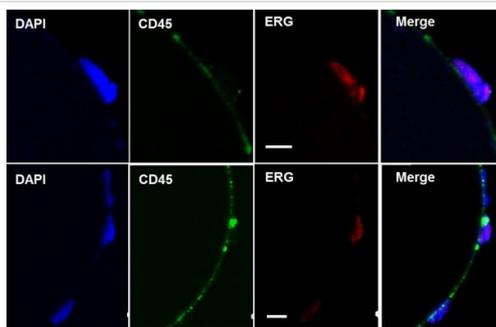
Image from Litovkin K et al. PLoS One. 2015;10(6):e0130651. Fig 5.; doi: 10.1371/journal.pone.0130651.

ERG and GSTP1 immunostainings of human prostate cancer samples using [ab92513](#).

Representative immunohistochemical images of prostate cancer samples are shown that were positive for ERG and negative for GSTP1 (A), positive for both ERG and GSTP1 (B), negative for both ERG and GSTP1(C), and negative for ERG and positive for GSTP1 (D). The internal staining control for ERG is the endothelium (arrows) and for GSTP1 the stromal and/or basal cells of normal prostate glands. N, normal prostate gland; S, Stroma; T, tumor gland. Scale bars equal 100µm

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab92513](#)).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



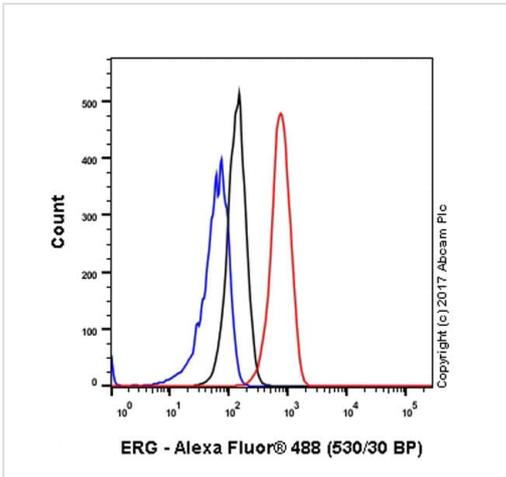
Immunocytochemistry/ Immunofluorescence - Anti-ERG antibody [EPR3864] - BSA and Azide free

(ab214796)

Image from Kirby BJ et al. PLoS One. 2012;8(12):e83903. Fig 4.; doi: 10.1371/journal.pone.0035976.

Functional characterization and detection of genetic alterations in GEDI-captured cells. The TMPRSS2:ERG fusion protein is detected in GEDI-captured circulating tumor cells (CTCs) from a castrate-resistant prostate cancer (CRPC) patient. PSMA-captured CTCs were stained on the device with [ab92513](#). Representative examples of PSMA+/CD45- CTCs are shown, two of which are positive for ERG. Scale bars: 10 microns.

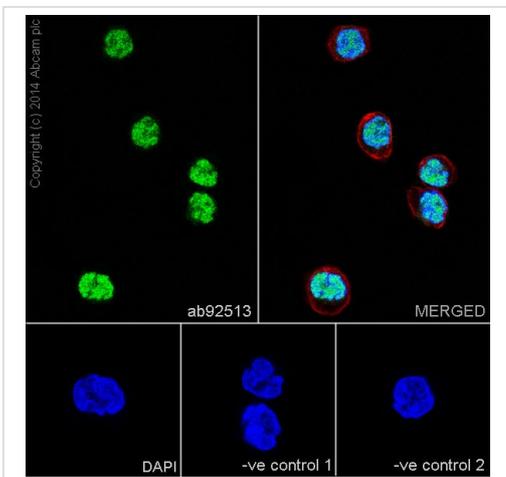
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab92513](#)).



Flow Cytometry - Anti-ERG antibody [EPR3864] - BSA and Azide free (ab214796)

Flow Cytometry analysis of THP-1 (human monocytic leukemia cell line) cells labeling ERG with purified [ab92513](#) at 1:1000 dilution (1ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488)([ab150077](#))(1:2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black)([ab172730](#)) was used as the isotype control, Cell without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

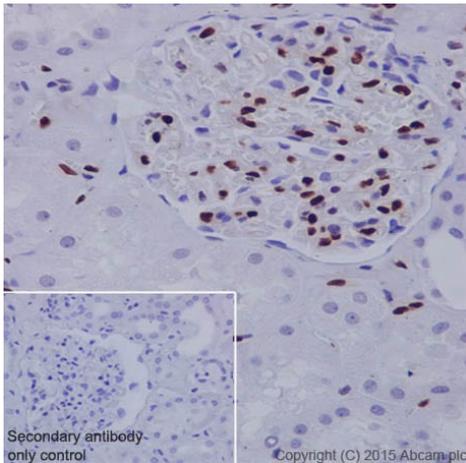
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab92513](#)).



Immunocytochemistry/ Immunofluorescence - Anti-ERG antibody [EPR3864] - BSA and Azide free (ab214796)

Immunofluorescence staining of THP-1 (human monocytic leukemia cell line) cells with purified [ab92513](#) at a working dilution of 1/100, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit ([ab150077](#)), used at a dilution of 1/1000. [ab7291](#), a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with [ab150120](#) (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified [ab92513](#) was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody ([ab150120](#)) at a dilution of 1/500. For negative control 2, [ab7291](#) (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody ([ab150077](#)) at a dilution of 1/400.

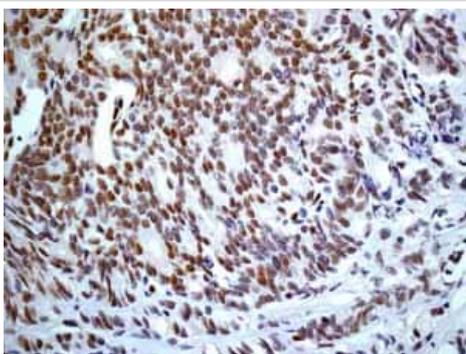
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab92513](#)).



Immunohistochemical staining of paraffin embedded human kidney with purified [ab92513](#) at a working dilution of 1/1000. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab92513](#)).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERG antibody [EPR3864]
- BSA and Azide free ([ab214796](#))

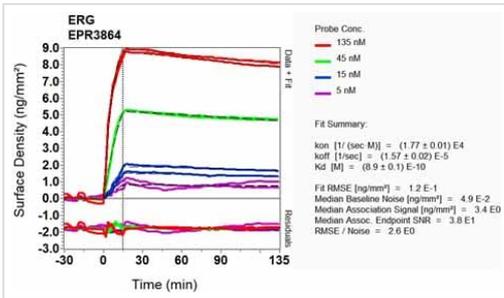


Immunohistochemical analysis of paraffin embedded Human Prostatic adenocarcinoma stage 3 tissue using unpurified [ab92513](#) showing +ve staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab92513](#)).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERG antibody [EPR3864]
- BSA and Azide free ([ab214796](#))



OI-RD Scanning - Anti-ERG antibody [EPR3864] -
BSA and Azide free (ab214796)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab92513](#)).

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-ERG antibody [EPR3864] - BSA and Azide free (ab214796)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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