# abcam

## Product datasheet

## Alexa Fluor® 647 Anti-ERG antibody [EPR3864] ab196149

ועלשעבע RabMAb

★★★★★ 3 Abreviews 16 References 画像数 5

#### 製品の概要

免疫原

特記事項

製品名 Alexa Fluor® 647 Anti-ERG antibody [EPR3864]

製品の詳細 Alexa Fluor® 647 Rabbit monoclonal [EPR3864] to ERG

由来種 Rabbit

標識 Alexa Fluor® 647. Ex: 652nm. Em: 668nm

アプリケーション 適用あり: ICC/IF 種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール

ICC/IF: THP-1 cells

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**.

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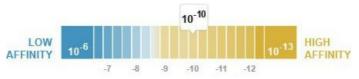
#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

**解離定数(K<sub>D</sub>値)** K<sub>D</sub> = 8.90 x 10 <sup>-10</sup> M



Learn more about K<sub>D</sub>

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

精製度 Protein A purified

**ポリ/モノ** モノクローナル **クローン名** EPR3864

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab196149の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/100. This product gave a positive signal in THP-1 cells fixed with 4% formaldehyde (10 min)

#### ターゲット情報

関連疾患

機能 Transcriptional regulator. May participate in transcriptional regulation through the recruitment of

SETDB1 histone methyltransferase and subsequent modification of local chromatin structure.

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.

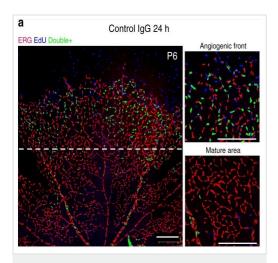
Note=Chromosomal aberrations involving ERG have been found in acute myeloid leukemia

(AML) Translocation t(16:21)(p.11:q.22) with ELIS. Translocation t(X:21)(q.25-26:q.22) with ELIS.

(AML). Translocation t(16;21)(p11;q22) with FUS. Translocation t(X;21)(q25-26;q22) with ELF4.

配列類似性 Belongs to the ETS family.

#### 画像

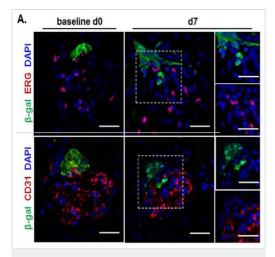


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-ERG antibody [EPR3864] (ab196149)

Pontes-Quero S et al Nat Commun. 2019 May 1;10(1):2016. doi: 10.1038/s41467-019-09875-7. Fig 2a. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

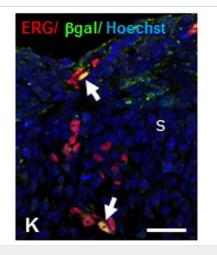
For mouse retina immunostaining, eyes were collected at the indicated time points and fixed in 4% PFA in PBS for 1 h at room temperature (RT). After two PBS washes, retinas were microdissected and stained. Briefly, retinas were blocked and permeabilized with 0.3% Triton X-100, 3% fetal bovine serum (FBS) and 3% donkey serum in PBS. Samples were then washed twice in PBLEC buffer (1 mM CaCl<sub>2</sub>, 1 mM MgCl<sub>2</sub>, 1 mM MnCl<sub>2</sub> and 1% Triton X-100 in PBS). Biotinylated isolectinB4 or primary antibodies (Panel a, ab196149 1/100 dilution) were diluted in PBLEC buffer and tissues were incubated in this solution for 2 h at RT or overnight at 4 °C. After five washes in blocking solution diluted 1:2, samples were incubated for 1 h at RT with Alexaconjugated secondary antibody. After two washes in PBS, retinas were mounted with Fluoromount-G. To detect EdU-labeled DNA, an additional step was performed before mounting using the Click-It EdU kit.

DII4/Notch signalling inhibition induces context-dependent proliferative effects. a–d Confocal micrographs of the postnatal retinal vasculature from animals treated at P5 with lgG (control) or anti-DII4 for 24 h (a, b) or 48 h (c, d). Anti-Erg (red) labels EC nuclei. EdU labels the nuclei of all cells in S-phase in the previous 4 h. Blue nuclei mark non-endothelial cells in S-phase, and double-positive (Erg+/EdU+) cell nuclei are pseudocoloured green to better highlight ECs in S-phase. Scale bars, 200 µm.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-ERG antibody [EPR3864] (ab196149)

Ruhnke L et al PLoS One. 2018 May 17;13(5):e0196752. doi: 10.1371/journal.pone.0196752. eCollection 2018. Fig 3a. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-ERG antibody [EPR3864] (ab196149)

Blanco MJ et al PLoS One. 2017 Sep 19;12(9):e0184767. doi: 10.1371/journal.pone.0184767. eCollection 2017. Fig 1k. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/ RLCs selectively differentiate to intraglomerular mesangial cells during EC model.

**Panel A shown only.** Representative confocal microscopy images for day 0 and day 7 of  $\beta$ -gal and the EC markers ERG (upper panels) or CD31 (lower panels) co-stained kidney slices.

Immunostainings and Acid fuchsin orange G (AFOG) staining were performed on paraffin-embedded 4-μm kidney sections. Antibodies were diluted in 1% BSA/TBS. Primary antibodies were incubated overnight at 4°C, secondary antibodies and Avidin D-conjugated horseradish peroxidase were incubated for 2 hours at room temperature. All immunofluorescence samples were counterstained with the nuclear marker 4′,6-diamidino-2-phenylindole (DAPI) and mounted with mowiol mounting medium. Endogenous peroxidase activity was suppressed with 3% hydrogen peroxide solution. Samples were counterstained with hematoxylin, dehydrated and mounted. The following antibodies were used: WT-1 (ab202639), nephrin, PDGFRβ (ab91066), α8-integrin, CD31, ERG (ab196149), β-galactosidase (ab9361), renin, CD45 (ab64100).

Mt4-mmp expression during early mouse embryonic development.

**Panel K shown only:** Double-labeled cells for the endothelial markers ERG (red, arrows in K) and β-gal (green) demonstrate that cells expressing Mt4-mmp in this location are endothelial cells. Abbreviations: da, dorsal aorta; fp, floor plate; s, somite; NCC, neural crest cells; NT, neural tube. Scale bars: 30  $\mu$ m (J-L).

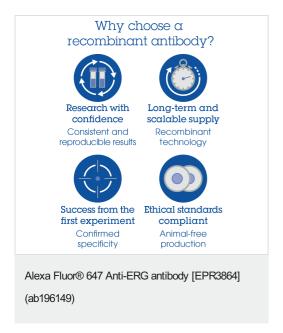
For immunohistochemical procedures, embryos were fixed in 4% PFA in PBS 0.1M pH 7.2 by immersion or perfusion depending on the developmental stage, cryoprotected in a 30% sucrose solution, and then embedded in OCT and sectioned in the cryostat at 20 µm thickness in the transverse plane. Immunohistochemistry was performed following standard protocols. Primary antibodies used include: polyclonal anti-CD31 hamster (1/1000), anti-βgalactosidase rabbit (1/1000; ab4761, Abcam), anti-FoxA2 mouse (1/250), anti-Nkx6.1 mouse (1/1000), anti-Olig2 rabbit (1/1000), anti-ERG-647 rabbit (1/500; ab196149, Abcam) and anti-WT-1 mouse (Wilms Tumor-1; 1/50;). Sections were incubated with the primary antibody diluted in PBS containing 0.1% Triton X-100 and 1% bovine serum albumin (BSA), for 48 h at 4°C. Subsequently, the sections were rinsed in PBS and incubated for 2 hours at room temperature with 488 or 594-Alexa™-conjugated fluorescent antibodies (1/1000). Sections were counterstained with Hoechst

(1:1000) for 5 min at room temperature to visualize nuclei.

ab196149 ab195887

Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-ERG antibody [EPR3864] (ab196149) ab196149 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 ab196149 at 1/100 dilution (shown in red) and <a href="mailto:ab195887">ab195887</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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