

## Product datasheet

# Anti-AP2 gamma/TFAP2C antibody [EPR20331] ab218107

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [8 References](#) [11 Images](#)

### Overview

<b>Product name</b>	Anti-AP2 gamma/TFAP2C antibody [EPR20331]
<b>Description</b>	Rabbit monoclonal [EPR20331] to AP2 gamma/TFAP2C
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB, IHC-P, Flow Cyt (Intra), IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: SK-BR-3, MDA-MB-435S, MCF7 and T-47D whole cell lysates. IHC-P: Human breast, placenta, breast cancer and seminoma tissues. ICC/IF: SK-BR-3 and MCF7 cells. Flow Cyt (intra): SK-BR-3 cells. IP: MCF7 whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number                   EPR20331  
Isotype                            IgG

## Applications

**The Abpromise guarantee**           Our **Abpromise guarantee** covers the use of ab218107 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
ICC/IF	★★★★★ (1)	1/500.
WB		1/1000. Detects a band of approximately 49 kDa (predicted molecular weight: 49 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/50.
IP		1/30.

## Target

**Function**                                   Sequence-specific DNA-binding protein that interacts with inducible viral and cellular enhancer elements to regulate transcription of selected genes. AP-2 factors bind to the consensus sequence 5'-GCCNNGGC-3' and activate genes involved in a large spectrum of important biological functions including proper eye, face, body wall, limb and neural tube development. They also suppress a number of genes including MCAM/MUC18, C/EBP alpha and MYC.

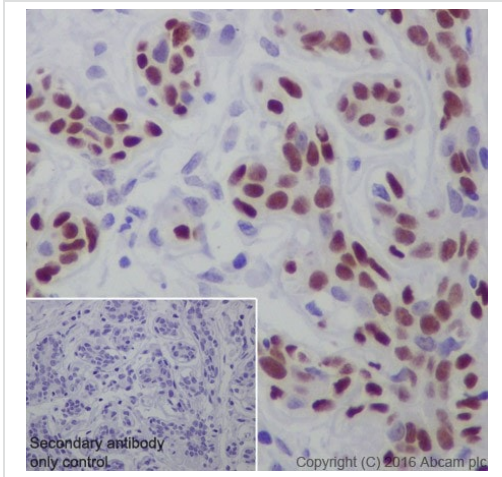
**Sequence similarities**                   Belongs to the AP-2 family.

**Domain**                                     The WW-binding motif mediates interaction with WWOX.

**Post-translational modifications**       Sumoylated on Lys-10; which inhibits transcriptional activity.

**Cellular localization**                   Nucleus.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

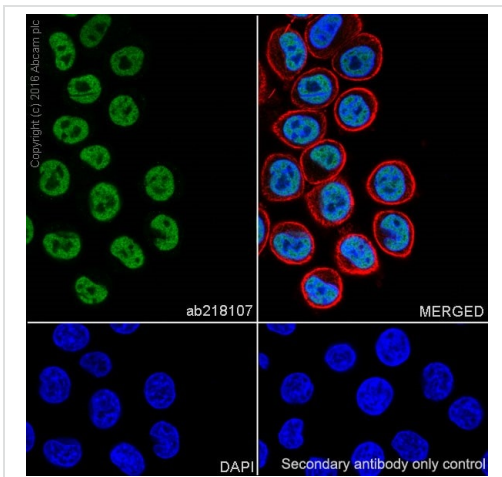
Immunohistochemical analysis of paraffin-embedded human breast tissue labeling AP2 gamma/TFAP2C with ab218107 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on human normal breast is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



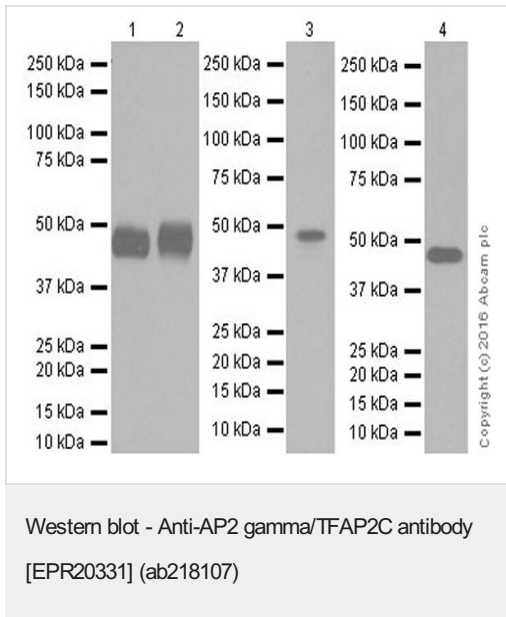
Immunocytochemistry/ Immunofluorescence - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SK-BR-3 (Human mammary gland adenocarcinoma cell line) cells labeling AP2 gamma/TFAP2C with ab218107 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on SK-BR-3 cell line.

The nuclear counterstain is DAPI (blue). Tubulin is detected with [ab195889](#) (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488) ([ab150077](#)) at 1/1000 dilution.



**Lanes 1-2 :** Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107) at 1/1000 dilution

**Lanes 3-4 :** Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107) at 1/2000 dilution

**Lane 1 :** SK-BR-3 (Human mammary gland adenocarcinoma cell line) whole cell lysate

**Lane 2 :** MDA-MB-435S (Human ductal carcinoma cell line) whole cell lysate

**Lane 3 :** MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

**Lane 4 :** T-47D (Human ductal breast epithelial tumor cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

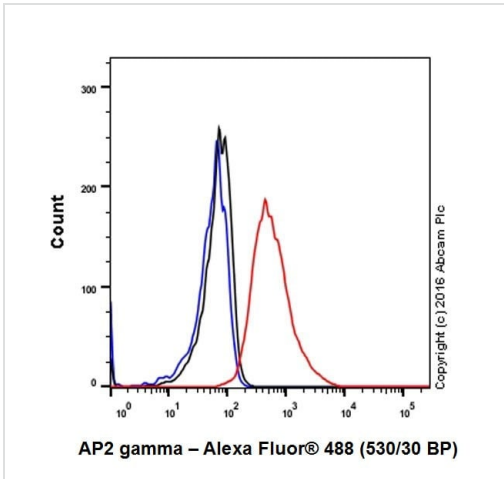
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 49 kDa

**Observed band size:** 49 kDa

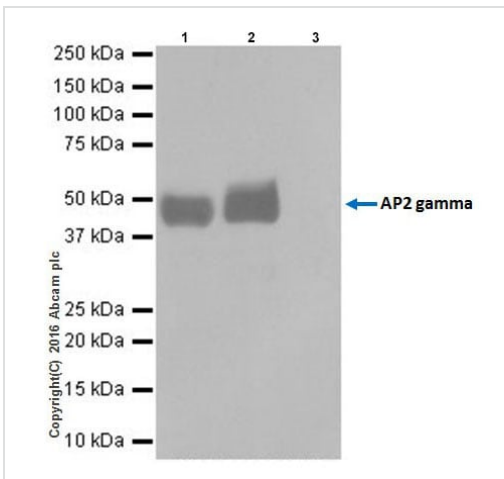
Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/2: 30 seconds; Lane 3: 10 seconds; Lane 4: 3 minutes.



Flow Cytometry (Intracellular) - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed SK-BR-3 (Human mammary gland adenocarcinoma cell line) cells labeling AP2 gamma/TFAP2C with ab218107 at 1/50 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

AP2 gamma/TFAP2C was immunoprecipitated from 0.35 mg of MCF7 (Human breast adenocarcinoma cell line) whole cell lysate with ab218107 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab218107 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

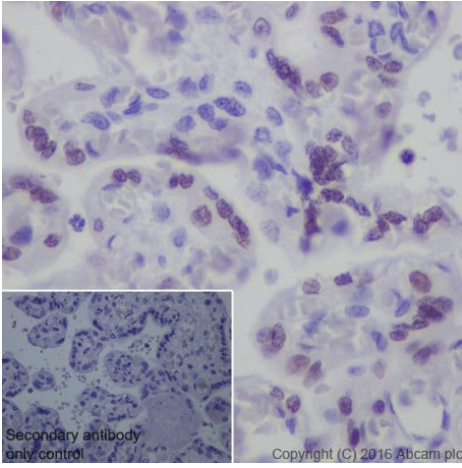
Lane 1: MCF7 whole cell lysate, 10 µg (Input).

Lane 2: ab218107 IP in MCF7 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab2018107** in MCF7 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

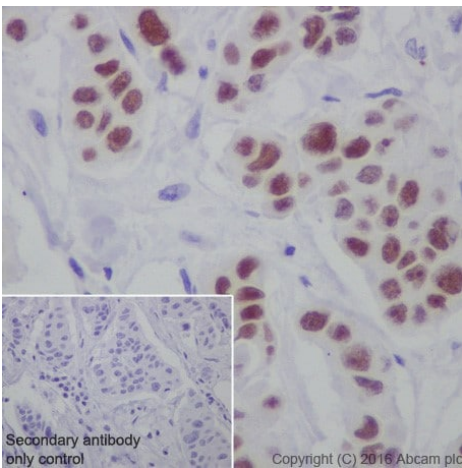
Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling AP2 gamma/TFAP2C with ab218107 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on human placenta is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

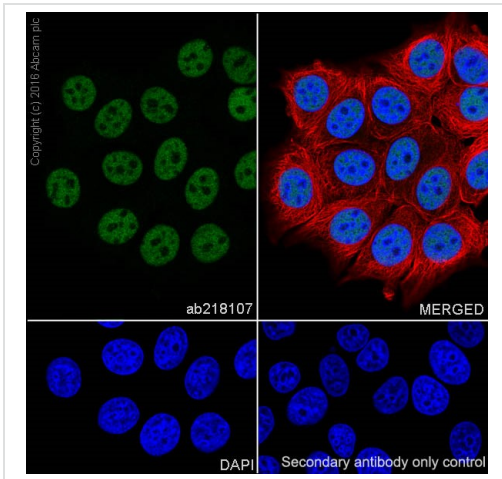
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling AP2 gamma/TFAP2C with ab218107 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nuclear staining on poorly differentiated human breast cancer is observed. The data is consistent with the literature (PMID: 18825690).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

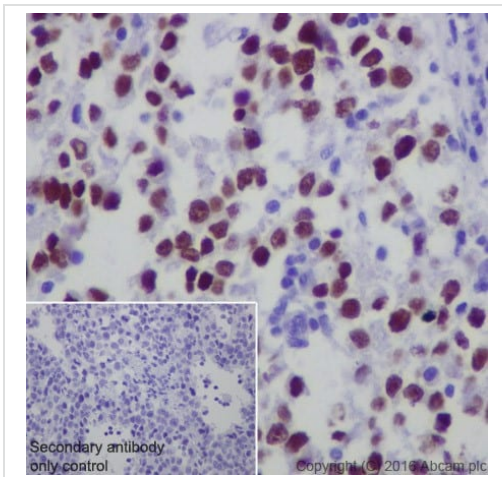
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) cells labeling AP2 gamma/TFAP2C with ab218107 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on MCF7 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab195889** (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

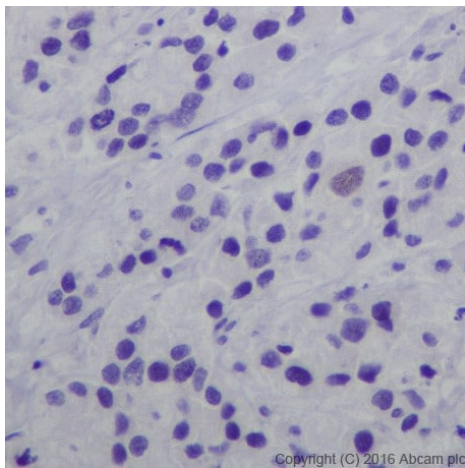
Immunohistochemical analysis of paraffin-embedded human seminoma tissue labeling AP2 gamma/TFAP2C with ab218107 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Nucleus staining on human seminoma is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling AP2 gamma/TFAP2C with ab218107 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Almost all tumor cells show negative staining on moderately differentiated human breast cancer. The data is consistent with the literature (PMID: 18825690).

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

### 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-AP2 gamma/TFAP2C antibody [EPR20331] (ab218107)

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

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