

## Product datasheet

### Anti-AGR2 + AGR3 antibody [EPR20164-222] ab216071

Recombinant RabMAb

[1 References](#) [8 Images](#)

#### Overview

<b>Product name</b>	Anti-AGR2 + AGR3 antibody [EPR20164-222]
<b>Description</b>	Rabbit monoclonal [EPR20164-222] to AGR2 + AGR3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human AGR2 His-tagged recombinant protein (aa21-175); Human AGR3 GST-tagged recombinant protein (aa21-166); MCF7, HT-29 and PC-3 whole cell lysates; Mouse and rat stomach lysates; Human lung and stomach lysates. ICC/IF: MCF7 cells. Flow Cyt (intra): MCF7 cells.
<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>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR20164-222

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab216071 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 17 kDa (predicted molecular weight: 20, 19 kDa).
ICC/IF		1/500.
Flow Cyt (Intra)		1/500.

## Target

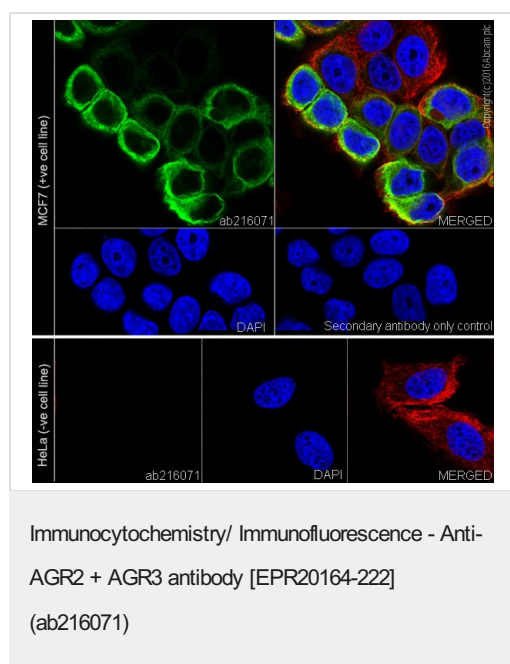
### Relevance

AGR2 (Anterior Gradient 2), also known as AG2 (hAG2, HAG2 in human), or GOB4, and AGR3 (Anterior Gradient 3), also known as AG3 (hAG3, HAG3 in human), or BCMP11, are secreted cytoplasmic proteins which are involved in metastasis induction and p53 tumour suppressor inhibition. They may serve as molecular markers and potential therapeutic targets for hormone-responsive breast tumours; AGR2 was reported also as a marker of other carcinomas. Xenopus homolog of these proteins is associated with anteroposterior fate determination during early development.

### Cellular localization

Secreted

## Images



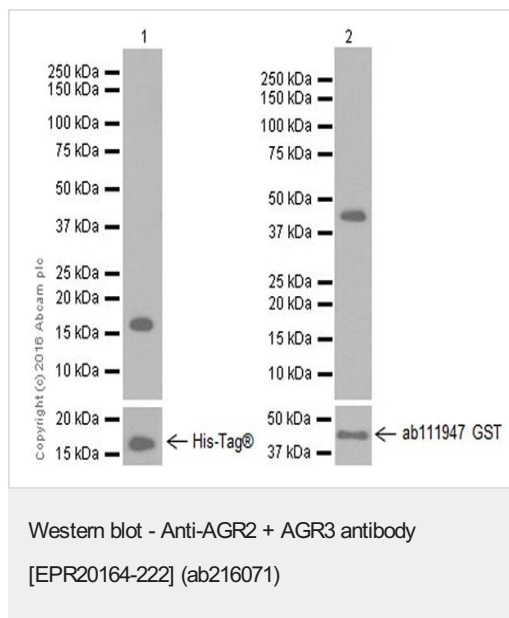
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) and HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling AGR2 + AGR3 with ab216071 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on MCF7 cell line.

**Negative control:** HeLa (PMID: 16551856).

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.



**All lanes :** Anti-AGR2 + AGR3 antibody [EPR20164-222]  
(ab216071) at 1/10000 dilution

**Lane 1 :** Human AGR2 His-tagged recombinant protein (aa21-175)

**Lane 2 :** Human AGR3 GST-tagged recombinant protein (aa21-166)

Lysates/proteins at 0.01 µg per lane.

### Secondary

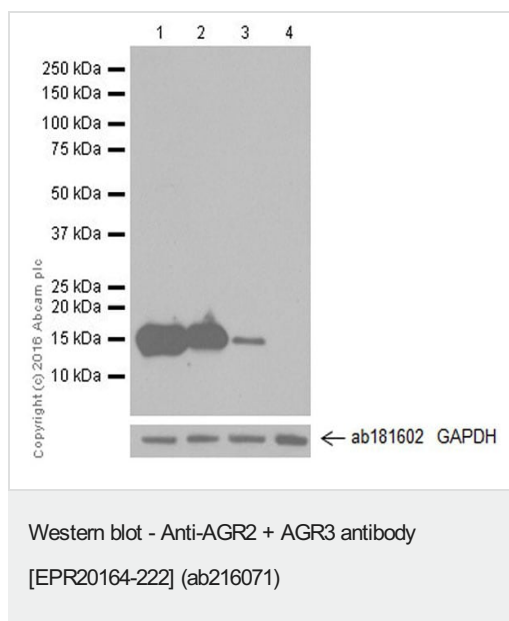
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at  
1/100000 dilution

**Predicted band size:** 20, 19 kDa

**Observed band size:** 17,42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 15 seconds; Lane 2: 3 seconds.



**All lanes :** Anti-AGR2 + AGR3 antibody [EPR20164-222]  
(ab216071) at 1/1000 dilution

**Lane 1 :** MCF7 (Human breast adenocarcinoma cell line) whole  
cell lysate at 20 µg

**Lane 2 :** HT-29 (Human colorectal adenocarcinoma cell line) whole  
cell lysate at 20 µg

**Lane 3 :** PC-3 (Human prostate adenocarcinoma cell line) whole  
cell lysate at 10 µg

**Lane 4 :** HeLa (Human epithelial cell line from cervix  
adenocarcinoma) whole cell lysate at 20 µg

### Secondary

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

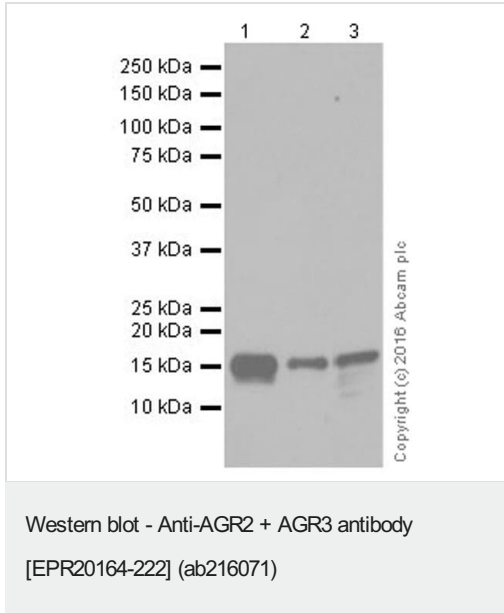
**Predicted band size:** 20, 19 kDa

**Observed band size:** 17 kDa

**Exposure time:** 1 minute

Blocking/Dilution buffer: 5% NFDm/TBST.

According to the literature AGR2 is not expressed in HeLa (PMID: 16551856). Currently no published data is available regarding the expression of AGR3 in HeLa cells.



**All lanes** : Anti-AGR2 + AGR3 antibody [EPR20164-222] (ab216071) at 1/1000 dilution

**Lane 1** : Mouse stomach tissue lysate

**Lane 2** : Rat stomach tissue lysate

**Lane 3** : Human lung tissue lysate

Lysates/proteins at 10 µg per lane.

### Secondary

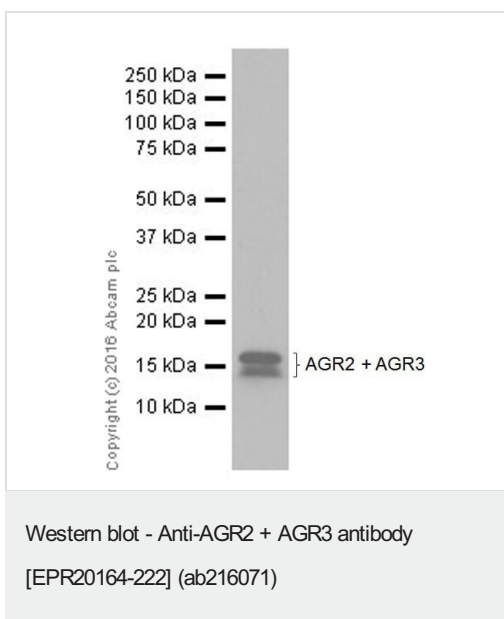
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 20, 19 kDa

**Observed band size:** 17 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



Anti-AGR2 + AGR3 antibody [EPR20164-222] (ab216071) at 1/2000 dilution + Human stomach lysate at 20 µg

### Secondary

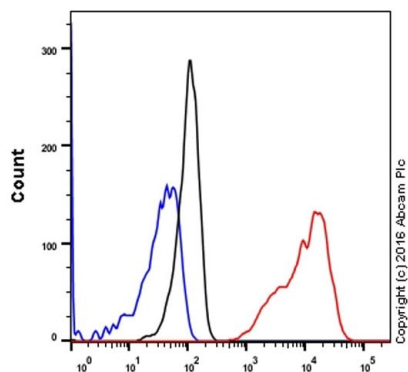
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 20, 19 kDa

**Observed band size:** 17,18 kDa

**Exposure time:** 1 second

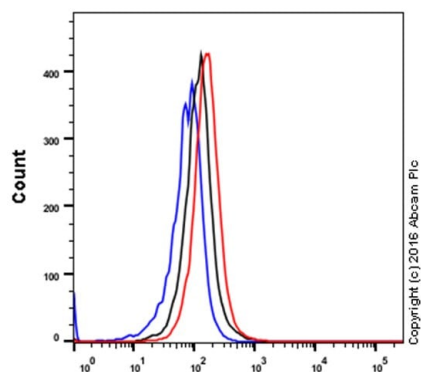
Blocking/Dilution buffer: 5% NFDm/TBST.



AGR2 + AGR3 – Alexa Fluor® 488 (530/30 BP)

Flow Cytometry (Intracellular) - Anti-AGR2 + AGR3 antibody [EPR20164-222] (ab216071)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed MCF7 (Human breast adenocarcinoma cell line) cells labeling AGR2 + AGR3 with ab216071 at 1/500 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.



AGR2 + AGR3 – Alexa Fluor® 488 (530/30 BP)

Flow Cytometry (Intracellular) - Anti-AGR2 + AGR3 antibody [EPR20164-222] (ab216071)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling AGR2 + AGR3 with ab216071 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.

### 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-AGR2 + AGR3 antibody [EPR20164-222] (ab216071)

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

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