

### **AGR2 Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5351

## **Specification**

### AGR2 Antibody (N-term) - Product Information

Application IF, IHC-P, WB,E

Primary Accession
Reactivity
O95994
Human

Predicted Mouse, Zebrafish

Host Rabbit Clonality polyclonal

Calculated MW H=20;M=20;Z=20 KDa

Isotype Rabbit IgG
Antigen Source HUMAN

### AGR2 Antibody (N-term) - Additional Information

**Gene ID** 10551

## **Antigen Region**

13-42

#### **Other Names**

AGR2; AG2; Anterior gradient protein 2 homolog; HPC8; Secreted cement gland protein XAG-2 homolog

## **Dilution**

IF~~1:10~50 IHC-P~~1:10~50 WB~~1:1000

#### Target/Specificity

This Anterior Gradient 2 (AGR2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-42 amino acids from the N-terminal region of human Anterior Gradient 2 (AGR2).

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

AGR2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.



## AGR2 Antibody (N-term) - Protein Information

Name AGR2

Synonyms AG2

#### **Function**

Required for MUC2 post-transcriptional synthesis and secretion. May play a role in the production of mucus by intestinal cells (By similarity). Proto-oncogene that may play a role in cell migration, cell differentiation and cell growth. Promotes cell adhesion (PubMed:<a href="http://www.uniprot.org/citations/23274113" target="blank">23274113</a>).

#### **Cellular Location**

Secreted. Endoplasmic reticulum {ECO:0000250|UniProtKB:088312}

#### **Tissue Location**

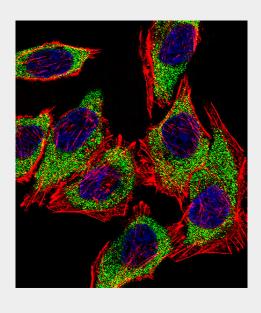
Expressed strongly in trachea, lung, stomach, colon, prostate and small intestine. Expressed weakly in pituitary gland, salivary gland, mammary gland, bladder, appendix, ovary, fetal lung, uterus, pancreas, kidney, fetal kidney, testis, placenta, thyroid gland and in estrogen receptor (ER)-positive breast cancer cell lines

### AGR2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

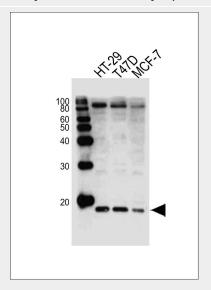
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# AGR2 Antibody (N-term) - Images





confocal Fluorescent image of A549 cell stained with AGR2 Antibody (N-term)(Cat#AW5351).A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with AGR2 primary antibody (1:25, 1 h at 37 $^{\circ}$ C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). AGR2 immunoreactivity is localized to Cytoplasm significantly.



All lanes: Anti-AGR2 Antibody (N-term)(AW5351) at 1/1000 dilution Lane 1: HT-29 whole cell lysates Lane 2: T47D whole cell lysates Lane 3: MCF-7 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size: 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

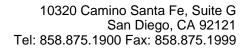


Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with AGR2 antibody (N-term) (Cat.#AW5351), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### AGR2 Antibody (N-term) - Background

Anterior gradient 2 (AGR2) is known as a cancer cell marker specifically up-regulated in response to depletion of serum and oxygen. AGR2 has been identified as a tumor marker in primary and secondary cancer lesions, and as a marker for detection of circulating tumor cells (CTCs). Elevated levels of AGR2 are known to increase the metastatic potential of cancer cells, but conditions leading to increased expression of AGR2 are not well understood.

#### AGR2 Antibody (N-term) - References





Zweitzig, D.R., Mol. Cell. Biochem. 306 (1-2), 255-260 (2007) Zhang, Y., Prostate Cancer Prostatic Dis. 10 (3), 293-300 (2007) Fletcher, G.C., Br. J. Cancer 88 (4), 579-585 (2003)