

### **AGR2 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6279c

#### **Specification**

### AGR2 Antibody (Center) - Product Information

Application WB, IHC-P,E
Primary Accession 095994

Other Accession <u>088312</u>, <u>05RZ65</u>

Reactivity Human

Predicted Zebrafish, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 95-124

#### AGR2 Antibody (Center) - Additional Information

#### **Gene ID** 10551

#### **Other Names**

Anterior gradient protein 2 homolog, AG-2, hAG-2, HPC8, Secreted cement gland protein XAG-2 homolog, AGR2, AG2

#### Target/Specificity

This AGR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 95-124 amino acids from the Central region of human AGR2.

## **Dilution**

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

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **AGR2 Antibody (Center) - 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: 23274113).

#### **Cellular Location**

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

#### **Tissue Location**

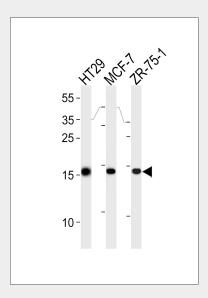
Expressed strongly in trachea, lung, stomach, colon, prostate and small intestine. Expressed weakly in pituitary gland, salivary gland, mammary gland, bladder, appendix, ovary, fetal lung, uterus, pancreas, kidney, fetal kidney, testis, placenta, thyroid gland and in estrogen receptor (ER)-positive breast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

## **AGR2 Antibody (Center) - Protocols**

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

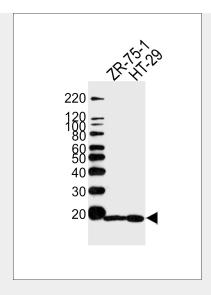
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### AGR2 Antibody (Center) - Images

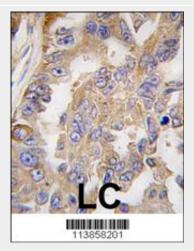


AGR2 Antibody (Center) (Cat. #AP6279c) western blot analysis in HT29,MCF-7,ZR-75-1 cell line lysates (35ug/lane). This demonstrates the AGR2 antibody detected the AGR2 protein (arrow).





Western blot analysis of lysates from ZR-75-1, HT29 cell line (from left to right), using AGR2 Antibody (Center)(Cat. #AP6279c). AP6279c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with AGR2 antibody (Center), 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 (Center) - Background

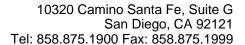
Anterior gradient 2 (AGR2) is known as a cancer cell marker specifically up-regulated in response to depletion of serum and oxygen. AGR2 has been identified as a tumor marker in primary and secondary cancer lesions, and as a marker for detection of circulating tumor cells (CTCs). Elevated levels of AGR2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

# **AGR2 Antibody (Center) - 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)

## **AGR2 Antibody (Center) - Citations**

- <u>Downregulation of AGR2, p21, and cyclin D and alterations in p53 function were associated</u> with tumor progression and chemotherapy resistance in epithelial ovarian carcinoma.
- Anterior gradient 2 is induced in cutaneous wound and promotes wound healing through its





adhesion domain.

- Tumor-secreted anterior gradient-2 binds to VEGF and FGF2 and enhances their activities by promoting their homodimerization.
- A humanized monoclonal antibody targeting secreted anterior gradient 2 effectively inhibits the xenograft tumor growth.