

Anterior Gradient 2 (AGR2) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6279a

Product Information

Application IHC-P, IF, WB, E

Primary Accession 095994

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGCalculated MW19979Antigen Region13-42

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 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).

Dilution IHC-P~~1:100~500 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent

concentration.

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 Anterior Gradient 2 (AGR2) Antibody (N-term) is for research use only and not

for use in diagnostic or therapeutic procedures.

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

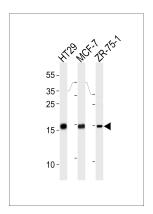
Background

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.

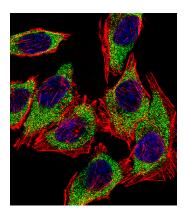
References

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)

Images

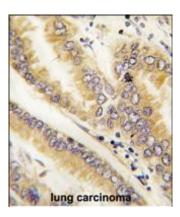


AGR2 Antibody (N-term) (Cat. #AP6279a) western blot analysis in HT29,MCF-7,ZR-75-1 cell line lysates (35ug/lane). This demonstrates the AGR2 antibody detected the AGR2 protein (arrow).



Fluorescent confocal image of A549 cell stained with AGR2 Antibody (N-term)(Cat#AP6279a).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°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.

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with AGR2 antibody (N-term) (Cat.#AP6279a), 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.