

AGR2 Antibody

Catalog # ASC11621

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	O95994
Other Accession	NP_006399 , 5453541
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	19979
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	AGR2 antibody can be used for detection of AGR2 by Western blot at 1 - 2 μ g/mL.

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	AGR2; Two isoforms of AGR2 exists as a result of alternative splicing event.
Reconstitution & Storage	AGR2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	AGR2 Antibody 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:O88312}
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

AGR2 Antibody: AGR2 (anterior gradient protein 2) and AGR3 are members of the anterior gradient homolog family. They 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 is ubiquitously expressed with upregulated expression in prostate cancer, breast cancer, lung cancer, renal carcinomas and endometrial carcinomas. AGR2 expression is positively correlated with that of the estrogen receptor (ER) and is negatively correlated with that of the epidermal growth factor receptor (EGFR).

References

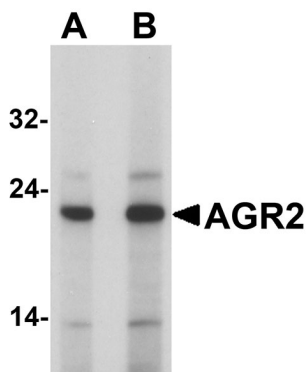
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Zheng W, Rosenstiel P, Huse K, et al. Evaluation of AGR2 and AGR3 as candidate genes for inflammatory bowel disease. *Genes Immun.* 2006; 7:11-8.

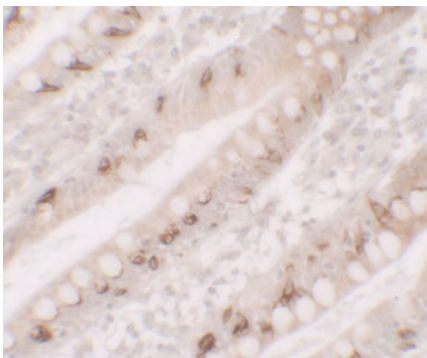
Gray TA, MacLaine NJ, Michie CO, et al. Anterior Gradient-3: a novel biomarker for ovarian cancer that mediates cisplatin resistance in xenograft models. *J. Immunol. Methods* 2012; 378:20-32.

Darb-Esfahani S, Fritzsche F, Kristiansen G, et al. Anterior gradient protein 2 (AGR2) is an independent prognostic factor in ovarian high-grade serous carcinoma. *Virchows Arch.* 2012; 461:109-16.

Images

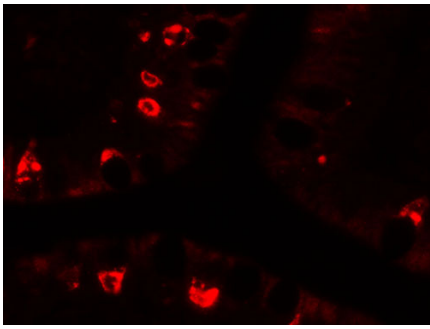


Western blot analysis of AGR2 in HeLa cell lysate with AGR2 antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$



Immunohistochemistry of AGR2 in human small intestine tissue with AGR2 antibody at 5 $\mu\text{g/mL}$.

Immunofluorescence of AGR2 in human small intestine tissue with AGR2 antibody at 20 $\mu\text{g/mL}$.



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