

Rabbit Anti-Anterior Gradient 2 (AGR2) [EP3278]: RM0352

Intended Use: For Research Use Only

Description: Anterior Gradient 2 (AGR2), also known as HAG-2 or Gob-4, is the human orthologue of the *Xenopus laevis* AGR protein XAG-2. In the frog embryo, XAG-2 is involved in cement gland differentiation and neural marker expression. However, the function of AGR2 in humans is unclear. AGR2 was first identified in studies focused on differentiating genes in estrogen receptor (ER)-positive breast cancers and is predominately expressed in tissues that contain mucus-secreting cells and/or function as endocrine organs. Strong AGR2 mRNA expression was found in normal human colon, stomach, rectum, prostate and breast. AGR2 has been shown to be co-expressed with ER in breast cancer cell lines and overexpression was found to attenuate p53 activation in UV-damaged cells. Immunohistochemical studies demonstrated cytoplasmic AGR2 staining in 65-83% of breast cancers. Positive staining for AGR2 in ER-positive breast cancers was significantly associated with poorer patient survival. Subsequent studies have also shown elevated AGR2 expression in adenocarcinomas of the esophagus, pancreas, and prostate. ARG2 expression was also highly expressed in Barrett's esophagus, a premalignant lesion characterized by intestinal metaplasia compared with normal esophageal epithelium.

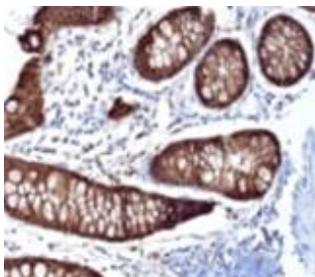
Specifications

Clone: EP3278
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: Synthetic peptide of human Anterior Gradient 2 aa 1-100
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
Anterior Gradient 2 (AGR2) Concentrated	RM0352	1 ml

IHC Procedure

Positive Control: Estrogen receptor (ER) positive-breast carcinoma
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human colon stained with anti-Anterior Gradient 2 using DAB

References:

1. Anterior gradient 2 is a binding stabilizer of hypoxia inducible factor-1 α that enhances CoCl₂ -induced doxorubicin resistance in breast cancer cells. Li Z, Zhet al. Cancer Sci. Aug;106(8):1041-9, 2015.
2. Prostate cancer cell phenotypes based on AGR2 and CD10 expression. Ho ME, et al. Mod Pathol. Jun;26(6):849-59, 2013.

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Rev. B

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