

AGR2 (T-17): sc-54561

BACKGROUND

AGR2 (anterior gradient protein 2), also known as AG2, GOB-4 or HAG-2, is a member of the anterior gradient homolog family. It is the human ortholog of XAG-2, the secreted *Xenopus laevis* anterior gradient protein. In *X. laevis*, ARG2 is involved in cement gland differentiation and neural marker gene expression. AGR2 is a secretory protein encoded by two different AGR2 transcripts. It interacts with LYPD3 and α -dystroglycan (DAG-1). 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). AGR2 may serve as a potential therapeutic marker for various cancers.

REFERENCES

1. Huber, M., Bahr, I., Krätzschar, J.R., Becker, A., Müller, E.C., Donner, P., Pohlenz, H.D., Schneider, M.R. and Sommer, A. 2004. Comparison of proteomic and genomic analyses of the human breast cancer cell line T47D and the antiestrogen-resistant derivative T47D-r. *Mol. Cell. Proteomics* 3: 43-55.
2. Liu, D., Rudland, P.S., Sibson, D.R., Platt-Higgins, A. and Barraclough, R. 2005. Human homologue of cement gland protein, a novel metastasis inducer associated with breast carcinomas. *Cancer Res.* 65: 3796-3805.
3. Zhang, J.S., Gong, A., Cheville, J.C., Smith, D.I. and Young, C.Y. 2005. AGR2, an androgen-inducible secretory protein overexpressed in prostate cancer. *Genes Chromosomes Cancer* 43: 249-259.

CHROMOSOMAL LOCATION

Genetic locus: AGR2 (human) mapping to 7p21.1; Agr2 (mouse) mapping to 12 A3.

SOURCE

AGR2 (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of AGR2 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54561 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

AGR2 (T-17) is recommended for detection of AGR2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for AGR2 siRNA (h): sc-61956, AGR2 siRNA (m): sc-61957, AGR2 shRNA Plasmid (h): sc-61956-SH, AGR2 shRNA Plasmid (m): sc-61957-SH, AGR2 shRNA (h) Lentiviral Particles: sc-61956-V and AGR2 shRNA (m) Lentiviral Particles: sc-61957-V.

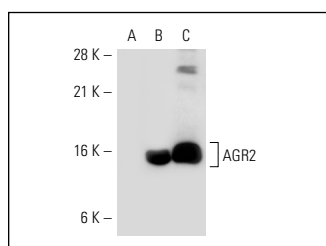
Molecular Weight of AGR2: 18-21 kDa.

Positive Controls: AGR2 (h): 293 Lysate: sc-112951 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



AGR2 (T-17): sc-54561. Western blot analysis of AGR2 expression in non-transfected 293: sc-110760 (A), human AGR2 transfected 293: sc-112951 (B) and MCF7 (C) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
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Try **AGR2/3 (C-7): sc-376653** or **AGR2 (6C5): sc-101211**, our highly recommended monoclonal alternatives to AGR2 (T-17).