

AGR3 (M-16): sc-54565

BACKGROUND

AGR3 (anterior gradient protein 3), also called AG3, BCMP11 (breast cancer membrane protein 11) or hAG-3, is a secreted extracellular protein. It is a member of the anterior gradient homolog family. AGR3 shares a high degree of sequence homology with AGR2, the human ortholog of XAG-2 (the secreted *Xenopus laevis* anterior gradient protein). AGR3 interacts with LYPD3 and α -dystroglycan. AGR3 is highly prevalent in breast cancers and may serve as a potential therapeutic marker.

REFERENCES

1. Adam, P.J., et al. 2003. Comprehensive proteomic analysis of breast cancer cell membranes reveals unique proteins with potential roles in clinical cancer. *J. Biol. Chem.* 278: 6482-6489.
2. Fletcher, G.C., et al. 2003. hAG-2 and hAG-3, human homologues of genes involved in differentiation, are associated with oestrogen receptor-positive breast tumours and interact with metastasis gene C4.4a and dystroglycan. *Br. J. Cancer* 88: 579-585.
3. Huber, M., et al. 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.
4. Rundle, A. 2005. Molecular epidemiology of physical activity and cancer. *Cancer Epidemiol. Biomarkers Prev.* 14: 227-236.
5. Rundle, A.G., et al. 2005. Preliminary studies on the effect of moderate physical activity on blood levels of glutathione. *Biomarkers* 10: 390-400.
6. Persson, S., et al. 2005. Diversity of the protein disulfide isomerase family: identification of breast tumor induced hAG-2 and hAG-3 as novel members of the protein family. *Mol. Phylogenet. Evol.* 36: 734-740.

CHROMOSOMAL LOCATION

Genetic locus: AGR3 (human) mapping to 7p21.1; Agr3 (mouse) mapping to 12 A3.

SOURCE

AGR3 (M-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of AGR3 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-54565 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.

RESEARCH USE

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

APPLICATIONS

AGR3 (M-16) is recommended for detection of AGR3 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 AGR3 siRNA (h): sc-61958, AGR3 siRNA (m): sc-61959, AGR3 shRNA Plasmid (h): sc-61958-SH, AGR3 shRNA Plasmid (m): sc-61959-SH, AGR3 shRNA (h) Lentiviral Particles: sc-61958-V and AGR3 shRNA (m) Lentiviral Particles: sc-61959-V.

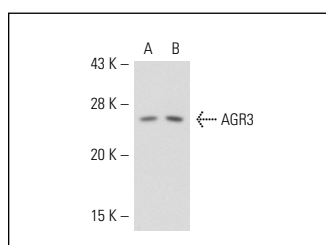
Molecular Weight of AGR3: 19 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, SK-BR-3 cell lysate: sc-2218 or RAW 264.7 whole cell lysate: sc-2211.

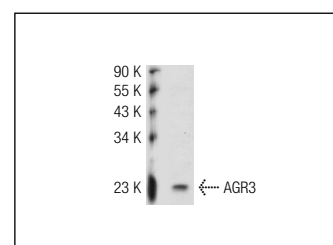
RECOMMENDED SECONDARY REAGENTS

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



AGR3 (M-16): sc-54565. Western blot analysis of AGR3 expression in MCF7 (A) and SK-BR-3 (B) whole cell lysates.



AGR3 (M-16): sc-54565. Western blot analysis of AGR3 expression in RAW 264.7 whole cell lysate.

PROTOCOLS

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



Try **AGR3 (G-10): sc-390940**, our highly recommended monoclonal alternative to AGR3 (M-16).