

AGR3 (E-16): sc-54564

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.

CHROMOSOMAL LOCATION

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

SOURCE

AGR3 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AGR3 of human 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-54564 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.

PROTOCOLS

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

APPLICATIONS

AGR3 (E-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), 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).

AGR3 (E-16) is also recommended for detection of AGR3 in additional species, including equine and avian.

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) 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.