

AGR3 (G-10): sc-390940

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.

CHROMOSOMAL LOCATION

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

SOURCE

AGR3 (G-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 122-155 near the C-terminus of AGR3 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AGR3 (G-10) is available conjugated to agarose (sc-390940 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390940 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390940 PE), fluorescein (sc-390940 FITC), Alexa Fluor® 488 (sc-390940 AF488), Alexa Fluor® 546 (sc-390940 AF546), Alexa Fluor® 594 (sc-390940 AF594) or Alexa Fluor® 647 (sc-390940 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390940 AF680) or Alexa Fluor® 790 (sc-390940 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390940 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

AGR3 (G-10) is recommended for detection of AGR3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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.

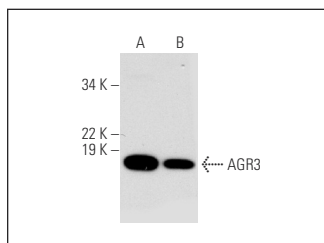
Molecular Weight of AGR3: 19 kDa.

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

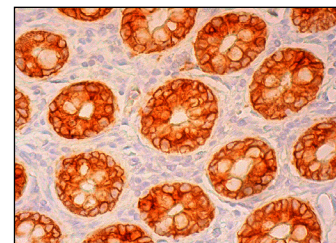
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



AGR3 (G-10): sc-390940. Western blot analysis of AGR3 expression in MCF7 (A) and SK-BR-3 (B) whole cell lysates.



AGR3 (G-10): sc-390940. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Chi, J., et al. 2020. AGR3 promotes the stemness of colorectal cancer via modulating Wnt/ β -catenin signalling. *Cell. Signal.* 65: 109419.
- Wang, K., et al. 2022. Integrated multi-omics profiling of high-grade estrogen receptor-positive, HER2-negative breast cancer. *Mol. Oncol.* 16: 2413-2431.

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 for detailed protocols and support products.