BRAG2 (D-10): sc-515803



The Power to Question

BACKGROUND

The ADP-ribosylation factor (ARF) protein family are structurally and functionally conserved members of the Ras superfamily of regulatory GTP-binding proteins. ARFs influence vesicle trafficking and signal transduction in eukary-otic cells. ARF6 plays a role in protein trafficking near the plasma membrane, including receptor recycling, cell adhesion and cell migration. ARF6 colocalizes with the ARF guanine nucleotide-exchange protein (GEP) BRAG2, also designated GEP100. BRAG2 is ubiquitously expressed as two isoforms, BRAG2a and BRAG2b, which can cycle between the cytoplasm and the nucleus. BRAG2, via its interaction with ARF6, is involved in the regulation of cell adhesion by controlling Integrin $\beta 1$ endocytosis and E-cadherin redistribution. BRAG2 has also been shown to bind directly to Tyr 1068/1086-phosphorylated EGFR to activate ARF6, which induces tumor invasion in MCF7 cells. Therefore, BRAG2 may contribute to the metastasis and malignancy of some breast cancer cells.

REFERENCES

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- Pajcini, K.V., et al. 2008. Myoblasts and macrophages share molecular components that contribute to cell-cell fusion. J. Cell Biol. 180: 1005-1019.
- 8. Morishige, M., et al. 2008. GEP100 links epidermal growth factor receptor signalling to Arf6 activation to induce breast cancer invasion. Nat. Cell Biol. 10: 85-92.

CHROMOSOMAL LOCATION

Genetic locus: IQSEC1 (human) mapping to 3p25.2; Iqsec1 (mouse) mapping to 6 D1.

SOURCE

BRAG2 (D-10) is a mouse monoclonal antibody raised against amino acids 261-375 mapping within an internal region of BRAG2 of human origin.

PRODUCT

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

APPLICATIONS

BRAG2 (D-10) is recommended for detection of BRAG2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 BRAG2 siRNA (h): sc-78384, BRAG2 siRNA (m): sc-146277, BRAG2 shRNA Plasmid (h): sc-78384-SH, BRAG2 shRNA Plasmid (m): sc-146277-SH, BRAG2 shRNA (h) Lentiviral Particles: sc-78384-V and BRAG2 shRNA (m) Lentiviral Particles: sc-146277-V.

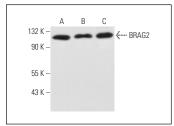
Molecular Weight of BRAG2: 100 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, MDA-MB-231 cell lysate: sc-2232 or ZR-75-1 cell lysate: sc-2241.

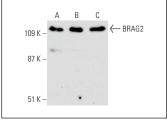
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG κ BP-FITC: sc-516140 or m-lgG 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.

DATA







BRAG2 (D-10): sc-515803. Western blot analysis of BRAG2 expression in MDA-MB-231 (**A**), Hep G2 (**B**) and ZR-75-1 (**C**) whole cell lysates.

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.