

ARHGEF5 (4-YD14): sc-134269

BACKGROUND

Rho GTPases, which play fundamental roles in numerous cellular processes, are initiated by external stimuli that signal through G protein-coupled receptors. ARHGEF5 (Rho guanine nucleotide exchange factor (GEF) 5), also known as P60 or transforming immortalized mammary oncogene (TIM), is a 1,597 amino acid cytoplasmic protein. ARHGEF5 is believed to form a complex with G proteins and be involved in the initiation of Rho-dependent signals. It has also been suggested that ARHGEF5 may be involved in the organization of the cytoskeleton. ARHGEF5 contains one PH domain, one DH domain and one SH3 domain. Existing as two isoforms produced by alternative splicing, ARHGEF5 is mainly expressed in pancreas, liver, kidney, placenta and lung.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ARHGEF5 (human) mapping to 7q35; Arhgef5 (mouse) mapping to 6 B2.1.

SOURCE

ARHGEF5 (4-YD14) is a mouse monoclonal antibody raised against recombinant ARHGEF5 protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

ARHGEF5 (4-YD14) is recommended for detection of ARHGEF5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:1000-1:10000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:300-1:3000).

Suitable for use as control antibody for ARHGEF5 siRNA (h): sc-89421, Arhgef5 siRNA (m): sc-141228, ARHGEF5 shRNA Plasmid (h): sc-89421-SH, Arhgef5 shRNA Plasmid (m): sc-141228-SH, ARHGEF5 shRNA (h) Lentiviral Particles: sc-89421-V and Arhgef5 shRNA (m) Lentiviral Particles: sc-141228-V.

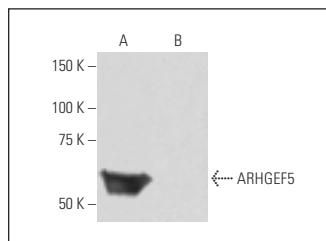
Molecular Weight of ARHGEF5: 177/60 kDa.

Positive Controls: human ARHGEF5 transfected 293T whole cell lysate or c4 whole cell lysate: sc-364186.

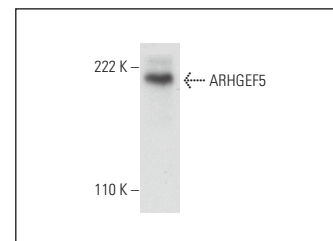
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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).

DATA



ARHGEF5 (4-YD14): sc-134269. Western blot analysis of ARHGEF5 expression in human ARHGEF5 transfected (A) and non-transfected (B) 293T whole cell lysates.



ARHGEF5 (4-YD14): sc-134269. Western blot analysis of ARHGEF5 expression in c4 whole cell lysate.

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.