

GAIP (h): 293 Lysate: sc-110588

BACKGROUND

Heterotrimeric G proteins function to relay information from cell surface receptors to intracellular effectors. In mammals, G protein α , β and γ polypeptides are encoded by at least 16, four and seven genes, respectively. Most interest in G proteins has been focused on their α subunits, since these proteins bind and hydrolyze GTP and most obviously regulate the activity of the best studied effectors. Four G_{α} GTPase-activating proteins (GAPs) have been identified and are designated RGS1 (regulator of G protein signaling), RGS4, RGS10 and GAIP (G_{α} -interacting protein). Each of these proteins has been shown to deactivate specific G_{α} isoforms by increasing the rate at which they convert GTP to GDP. RGS1, RGS4 and GAIP bind tightly to and exhibit GAP activity towards $G_{\alpha i}$, $G_{\alpha o}$ and $G_{\alpha t}$, but not $G_{\alpha s}$. RGS10 increases the GTP hydrolytic activity of several members of the $G_{\alpha i}$ subfamily including $G_{\alpha i3}$, $G_{\alpha z}$ and $G_{\alpha o}$.

REFERENCES

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6. Conklin, B.R. and Bourne, H.R. 1993. Structural elements of G_{α} subunits that interact with $G_{\beta\gamma}$ receptors and effectors. *Cell* 73: 631-641.
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CHROMOSOMAL LOCATION

Genetic locus: RGS19 (human) mapping to 20q13.33.

PRODUCT

GAIP (h): 293 Lysate represents a lysate of human GAIP transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

GAIP (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive GAIP antibodies.

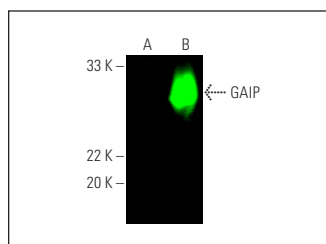
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

GAIP (B-6): sc-271810 is recommended as a positive control antibody for Western Blot analysis of enhanced human GAIP expression in GAIP transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

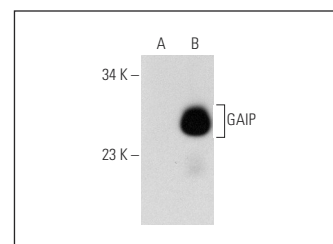
RECOMMENDED SUPPORT REAGENTS

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.

DATA



GAIP (B-6): sc-271810. Near-infrared western blot analysis of GAIP expression in non-transfected: sc-110760 (A) and human GAIP transfected: sc-110588 (B) 293 whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG κ BP-CFL 680: sc-516180.



GAIP (C-11): sc-365156. Western blot analysis of GAIP expression in non-transfected: sc-110760 (A) and human GAIP transfected: sc-110588 (B) 293 whole cell lysates.

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.