



**SZABO
SCANDIC**

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic



GAIP (h): 293T Lysate: sc-159994

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, 4 and 7 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 $G_{\alpha i-3}$, $G_{\alpha z}$, and $G_{\alpha o}$.

REFERENCES

1. Simon, M.I., Strathmann, M.P. and Gautam, N. 1991. Diversity of G proteins in signal transduction. *Science* 252: 802-808.
2. von Weizsäcker, E., Strathman, M.P. and Simon, M.I. 1992. Diversity among the β subunits of heterotrimeric GTP-binding proteins: characterization of a novel β -subunit cDNA. *Biochem. Biophys. Res. Commun.* 183: 350-356.
3. McLaughlin, S.K., McKinnon, P.J. and Margolskee, R.F. 1992. Gustducin is a taste-cell-specific G protein closely related to the transducins. *Nature* 357: 563-569.
4. Kleuss, C., Scherübl, H., Hescheler, J., Schultz, G. and Wittig, B. 1992. Different β -subunits determine G-protein interaction with transmembrane receptors. *Nature* 358: 424-426.
5. Cali, J.J., Balcueva, E.A., Rybalkin, I. and Robishaw, J.D. 1992. Selective tissue distribution of G protein γ subunits, including a new form of the γ subunits identified by cDNA cloning. *J. Biol. Chem.* 267: 24023-24027.
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.
7. Watson, N., Linder, M.E., Druey, K.M., Kehrl, J.H. and Blumer, K.J. 1996. RGS family members: GTPase-activating proteins for heterotrimeric G protein α -subunits. *Nature* 383: 172-175.
8. Hunt, T.W., Fields, T.A., Casey, P.J. and Peralta, E.G. 1996. RGS10 is a selective activator of $G_{\alpha i}$ GTPase activity. *Nature* 383: 175-177.

CHROMOSOMAL LOCATION

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

PRODUCT

GAIP (h): 293T Lysate represents a lysate of human GAIP transfected 293T 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): 293T Lysate is suitable as a Western Blotting positive control for human reactive GAIP antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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.