



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](https://www.linkedin.com/company/szaboscandic) 

GP49B (m): 293T Lysate: sc-120572

BACKGROUND

GP49 is an Ig superfamily-related, type I transmembrane glycoprotein. GP49 is expressed on the surface of myeloid cells involved in innate and adaptive immunity, such as mast cells, NK (natural killer) cells and macrophages. The two major subtypes, GP49A and GP49B, are encoded by different genes that share approximately 95% homology. GP49B is an inhibitory isoform that contains two C-terminal immunoreceptor tyrosine-based inhibitory motifs (ITIMs). GP49A is a non-inhibitory isoform that has a shorter cytoplasmic domain, which does not have ITIMs or tyrosine-based signaling motifs. GP49A may coordinate into a homodimer and induce calcium mobilization, eicosanoid production and cytokine gene transcription. HM18 is a human Fc receptor for IgA and NK cell inhibitory receptors that is believed to be a homolog to murine GP49B.

REFERENCES

1. Arm, J.P., Nwankwo, C. and Austen, K.F. 1997. Molecular identification of a novel family of human Ig superfamily members that possess immunoreceptor tyrosine-based inhibition motifs and homology to the mouse GP49B1 inhibitory receptor. *J. Immunol.* 159: 2342-2349.
2. McCormick, M.J., Castells, M.C., Austen, K.F. and Katz, H.R. 1999. The GP49A gene has extensive sequence conservation with the GP49B gene and provides GP49A protein, a unique member of a large family of activating and inhibitory receptors of the immunoglobulin superfamily. *Immunogenetics* 50: 286-294.
3. Wagtman, N. 1999. GP49: an Ig-like receptor with inhibitory properties on mast cells and natural killer cells. *Curr. Top. Microbiol. Immunol.* 244: 107-113.
4. Subramanian, A.B., Navarro, S., Carrasco, R.A., Marti, M. and Das, S. 2000. Role of exogenous inositol and phosphatidylinositol in glycosylphosphatidylinositol anchor synthesis of GP49 by *Giardia lamblia*. *Biochim. Biophys. Acta* 1483: 69-80.
5. Wang, L.L., Chu, D.T., Dokun, A.O. and Yokoyama, W.M. 2000. Inducible expression of the GP49B inhibitory receptor on NK cells. *J. Immunol.* 164: 5215-5220.
6. Lee, K.H., Ono, M., Inui, M., Yuasa, T. and Takai, T. 2000. Stimulatory function of GP49A, a murine Ig-like receptor, in rat basophilic leukemia cells. *J. Immunol.* 165: 4970-4977.

CHROMOSOMAL LOCATION

Genetic locus: *Lilrb4* (mouse) mapping to 10 B3.

PRODUCT

GP49B (m): 293T Lysate represents a lysate of mouse GP49B transfected 293T cells and is provided as 100 µg protein in 200 µl 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

GP49B (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GP49B antibodies. Recommended use: 10-20 µl 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.