

GBP2 (h): 293T Lysate: sc-111436

BACKGROUND

Guanylate-binding proteins, GBP1 and GBP2 are GTP-binding proteins with a high-turnover GTPase activity and an antiviral effect. GBP1 mediates an antiviral effect against vesicular stomatitis virus and encephalomyocarditis virus and plays a role in the IFN-mediated antiviral response against these viruses. GBP1 and GBP2 belong to a group of large GTP-binding proteins with a high concentration-dependent GTPase activity that have the common ability to undergo oligomerization. GBP1 and GBP2 are bone marrow-derived GTPases encoded by interferon-activated genes and are inducible following IFN treatment. Specifically, GBP1 is expressed in cultured mammary epithelial tumor cell lines after treatment with IFN- γ and LPS.

REFERENCES

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2. Anderson, S.L., Carton, J.M., Zhang, X. and Rubin, B.Y. 1999. Genomic organization and chromosomal localization of a new member of the murine interferon-induced guanylate-binding protein family. *J. Interferon Cytokine Res.* 19: 487-494.
3. Anderson, S.L., Carton, J.M., Lou, J., Xing, L. and Rubin, B.Y. 1999. Interferon-induced guanylate binding protein 1 (GBP1) mediates an antiviral effect against vesicular stomatitis virus and encephalomyocarditis virus. *Virology* 256: 8-14.
4. Sun, H., Jackson, M.J., Kundu, N. and Fulton, A.M. 1999. Interleukin-10 gene transfer activates interferon- γ and the interferon- γ -inducible genes GBP1/Mag-1 and Mig-1 in mammary tumors. *Int. J. Cancer* 80: 624-629.
5. Prakash, B., Praefcke, G.J., Renault, L., Wittinghofer, A. and Herrmann, C. 2000. Structure of human guanylate-binding protein 1 representing a unique class of GTP-binding proteins. *Nature* 403: 567-571.

CHROMOSOMAL LOCATION

Genetic locus: GBP2 (human) mapping to 1p22.2.

PRODUCT

GBP2 (h): 293T Lysate represents a lysate of human GBP2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

GBP2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive GBP2 antibodies. Recommended use: 10-20 μ l per lane.

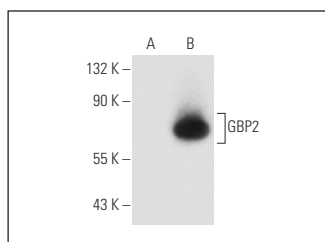
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GBP2 (G-9): sc-271568 is recommended as a positive control antibody for Western Blot analysis of enhanced human GBP2 expression in GBP2 transfected 293T 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



GBP2 (G-9): sc-271568. Western blot analysis of GBP2 expression in non-transfected: sc-117752 (A) and human GBP2 transfected: sc-111436 (B) 293T whole cell lysates.

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.

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.