

LITAF (h): 293T Lysate: sc-111383

BACKGROUND

Lipopolysaccharide (LPS) is a potent stimulator of monocytes and macrophages, causing secretion of tumor necrosis factor α (TNF α) and other inflammatory mediators. The inflammatory response to bacteria and bacterial products, such as LPS, is mediated by a variety of secreted factors, but cytotoxic effects of LPS have been ascribed to TNF α activity. LITAF (LPS-induced TNF α factor), Stat6B and the LITAF-Stat6B complex all play a role in the regulation of inflammatory cytokines in response to LPS or p53 stimulation in mammalian cells. LITAF is a nuclear protein crucial in TNF α gene transcription regulation. High levels of expression of LITAF mRNA have been observed predominantly in the placenta, peripheral blood leukocytes, lymph nodes and spleen.

REFERENCES

1. Myokai, F., et al. 1999. A novel lipopolysaccharide-induced transcription factor regulating tumor necrosis factor α gene expression: molecular cloning, sequencing, characterization, and chromosomal assignment. *Proc. Natl. Acad. Sci. USA* 96: 4518-4523.
2. Zhou, H.R., et al. 2003. Kinetics of lipopolysaccharide-induced transcription factor activation/inactivation and relation to proinflammatory gene expression in the murine spleen. *Toxicol. Appl. Pharmacol.* 187: 147-161.
3. Matsumura, Y., et al. 2004. PIG7/LITAF gene mutation and overexpression of its gene product in extramammary Paget's disease. *Int. J. Cancer* 111: 218-223.
4. Bolcato-Bellemin, A.L., et al. 2004. Molecular cloning and characterization of mouse LITAF cDNA: role in the regulation of tumor necrosis factor- α (TNF α) gene expression. *J. Endotoxin. Res.* 10: 15-23.
5. Tang, X., et al. 2005. LPS induces the interaction of a transcription factor, LPS-induced TNF α factor, and STAT6(B) with effects on multiple cytokines. *Proc. Natl. Acad. Sci. USA* 102: 5132-5137.

CHROMOSOMAL LOCATION

Genetic locus: LITAF (human) mapping to 16p12.

PRODUCT

LITAF (h): 293T Lysate represents a lysate of human LITAF 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

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

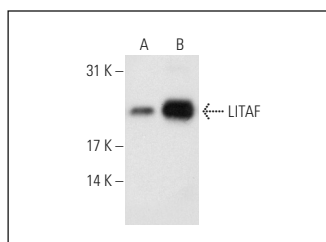
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

LITAF (C-5): sc-166719 is recommended as a positive control antibody for Western Blot analysis of enhanced human LITAF expression in LITAF 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



LITAF (C-5): sc-166719. Western blot analysis of LITAF expression in non-transfected: sc-117752 (A) and human LITAF transfected: sc-111383 (B) 293T 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.