

LITAF (30): sc-135974

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 16p13.13.

SOURCE

LITAF (30) is a mouse monoclonal antibody raised against amino acids 1-212 of LITAF of human origin.

PRODUCT

Each vial contains 50 μ g IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

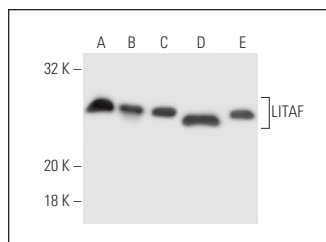
LITAF (30) is recommended for detection of LITAF of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for LITAF siRNA (h): sc-45684, LITAF shRNA Plasmid (h): sc-45684-SH and LITAF shRNA (h) Lentiviral Particles: sc-45684-V.

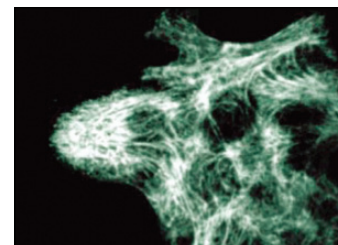
Molecular Weight of LITAF: 24 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

DATA



LITAF (30): sc-135974. Western blot analysis of LITAF expression in HeLa (A), Hep G2 (B), A-431 (C), LPS treated HL-60 (D) and LPS treated U-937 (E) whole cell lysates.



LITAF (30): sc-135974. Immunofluorescence staining of A-431 cells showing cytoskeletal localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures. Not for resale.