#2879 Store at –20°C

LITAF Antibody

☑ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #9516
Swiss-Prot Acc. #Q99732

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H	23 kDa	Rabbit**

Background: LITAF (PIG7/SIMPLE) is protein that contributes to the regulation of the inflammatory cytokine TNF-α (1-3). LITAF was identified as a transcription factor involved in LPS-induced TNF-α expression through interaction with the TNF-α promoter (1,4). The same protein, called PIG7, was independently described in a model for p53 regulation (2). A putative alternative spiced form of LITAF, named SIMPLE, encodes a protein with a unique carboxyl terminus (3). Studies on LITAF-deficient mice demonstrate that LITAF plays a significant role in the regulation of several inflammatory cytokines in response to LPS (5). The regulation of LITAF can occur through phosphorylation by p38α via the TLR pathway that leads to its nuclear translocation (5). Mutation in the LITAF/SIMPLE gene has been associated with an autosomal dominant demyelinating form of Charcot-Marie-Tooth disease (6).

Specificity/Sensitivity: LITAF Antibody dectects endogenous levels of total human LITAF protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human LITAF protein. Antibodies were purified by peptide affinity chromatography.

Background References:

(1) Myokai, F. et al. (1999) *Proc. Natl. Acad. Sci. USA* 96, 4518–4523.

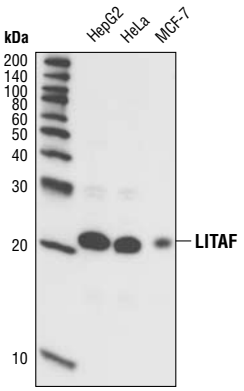
(2) Zhu, J. et al. (1999) *Oncogene* 18, 2149–2155.

(3) Moriwaki, Y. et al. (2001) *J. Biol. Chem.* 276, 23065–23076.

(4) Tang, X. et al. (2003) *Proc. Natl. Acad. Sci. USA* 100, 4096–4101.

(5) Tang, X. et al. (2006) *Proc. Natl. Acad. Sci. USA* 103, 13777–13782.

(6) Street, V.A. et al. (2003) *Neurology* 60, 22–26.



Western blot analysis of extracts from Hep G2, HeLa and MCF-7 cell types using LITAF Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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