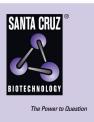
# SANTA CRUZ BIOTECHNOLOGY, INC.

# TIRAP (h): 293T Lysate: sc-114950



## BACKGROUND

Mammalian Toll-like receptors (TLRs) recognize conserved products of microbial metabolism and activate NF $\kappa$ B and other signaling pathways through the adapter protein MyD88. MyD88 functions as an adapter protein in the association of IL-1 receptor associated kinase (IRAK) with the IL-1 receptor. MyD88 contains a characteristic N-terminal death domain, which is essential for NF $\kappa$ B activation, and an adjacent Toll/II-1R homology domain (TIR domain), which is responsible for signal transduction. TIR domain-containing adapter protein (TIRAP), also designated MAL (MyD88 adapter-like), wyatt or TLR-4 adaptor protein, is a cytoplasmic TIR-domain-containing protein that activates NF $\kappa$ B, Jun N-terminal kinase and extracellular signal-regulated kinase-1 and -2. TIRAP forms homodimers and heterodimers with MyD88. IRAK-2, but not IRAK, is required for the activation of NF $\kappa$ B by TIRAP which associates with IRAK-2 through the TIR domain. In addition, TIRAP associates with TLR-4, suggesting that it plays a role in TLR-4 signal transduction.

## REFERENCES

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# CHROMOSOMAL LOCATION

Genetic locus: TIRAP (human) mapping to 11q24.2.

#### PRODUCT

TIRAP (h): 293T Lysate represents a lysate of human TIRAP transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ 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.

# **RESEARCH USE**

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

#### APPLICATIONS

TIRAP (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive TIRAP 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.

TIRAP (FL-235): sc-28822 is recommended as a positive control antibody for Western Blot analysis of enhanced human TIRAP expression in TIRAP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

# DATA

#### PROTOCOLS

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