

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

## BACKGROUND

Mammalian Toll-like receptors (TLRs) recognize conserved products of microbial metabolism and activate NFκB 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 NFκB activation, and an adjacent Toll/IL-1R homology domain (TIR domain), which is responsible for signal transduction. TIR domain-containing adapter protein (TIRAP), also designated MAL (MyD88 adapter-like), MyD88 or TLR-4 adaptor protein, is a cytoplasmic TIR-domain-containing protein that activates NFκB, Jun N-terminal kinase and extracellular signal-regulated kinase-1 and -2. TIRAP forms homodimers and heterodimers with MyD88. IRAK-2, but not IRAK-1, is required for the activation of NFκB 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 µg protein in 200 µl 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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ 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](http://www.scbt.com) or our catalog for detailed protocols and support products.