SANTA CRUZ BIOTECHNOLOGY, INC.

TRAF6 (C-16): sc-33897



BACKGROUND

Tumor necrosis factor receptor-associated factor 6 (TRAF6) regulates adaptive immunity, innate immunity and bone metabolism. TRAF6 is a ubiquitin (Ub) ligase that mediates the activation of protein kinases, such as transforming growth factor β -activated kinase (TAK1) and I κ B kinase (IKK), by catalyzing the formation of a unique polyubiquitin chain linked through Lys 63 of Ub. TRAF6 is essential for activating NF κ B signaling pathway in response to interleukin-1 and Toll-like receptor ligands. The coiled-coil domain of TRAF6 is essential for its auto-ubiquitination and activating NF κ B signaling pathway. TRAF6 interacts with various protein kinases including IRAK1/IRAK, SRC and PKC ζ , which provides a link between distinct signaling pathways.

REFERENCES

- 1. Xiong, H., et al. 2004. Interaction of TRAF6 with MAST205 regulates NF κ B activation and MAST205 stability. J. Biol. Chem. 279: 43675-43683.
- Yang, K., et al. 2004. The coiled-coil domain of TRAF6 is essential for its auto-ubiquitination. Biochem. Biophys. Res. Commun. 324: 432-439.

CHROMOSOMAL LOCATION

Genetic locus: TRAF6 (human) mapping to 11p12; Traf6 (mouse) mapping to 2 E2.

SOURCE

TRAF6 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TRAF6 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33897 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRAF6 (C-16) is recommended for detection of TRAF6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TRAF6 (C-16) is also recommended for detection of TRAF6 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for TRAF6 siRNA (h): sc-36717, TRAF6 siRNA (m): sc-36718, Plasmid (h): sc-36717-SH, TRAF6 shRNA Plasmid (m): sc-36718-SH,TRAF6 shRNA (h) Lentiviral Particles: sc-36717-V and TRAF6 shRNA (m) Lentiviral Particles: sc-36718-V.

Molecular Weight of TRAF6: 60 kDa.

Positive Controls: mouse kidney extract: sc-2255, HeLa whole cell lysate: sc-2200 or WEHI-231 whole cell lysate: sc-2213.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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. 2) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



TRAF6 (C-16): sc-33897. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Yamazaki, K., et al. 2009. Two mechanistically and temporally distinct NF-κB activation pathways in IL-1 signaling. Sci. Signal. 2: ra66.
- 2. Cui, J.G., et al. 2010. Differential regulation of interleukin-1 receptorassociated kinase-1 (IRAK-1) and IRAK-2 by microRNA-146 α and NF κ B in stressed human astroglial cells and in Alzheimer disease. J. Biol. Chem. 285: 38951-38960.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **TRAF6 (D-10): sc-8409**, our highly recommended monoclonal aternative to TRAF6 (C-16). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **TRAF6 (D-10): sc-8409**.