TRAF3 (322-444): sc-4233 WB



The Power to Question

BACKGROUND

Tumor necrosis factor (TNF)-activated cell signaling is mediated primarily through the TNF receptor 1 (TNF-R1) and, to a lesser extent, TNF-R2. Both TNF receptors are members of the expanding TNF receptor superfamily which includes the Fas antigen and CD40. Potential insight into an understanding of TNF receptor-mediated signaling was provided by the identification of two related proteins, TRAF1 and TRAF2 (for TNF receptor-associated factors 1 and 2, respectively). Both function to form heterodimeric complexes and associate with the cytoplasmic domain of TNF-R2. A third member of this protein family, alternatively designated CD40 bp, CRAF1, LAP1 or TRAF3, has been identified and shown to associate with the cytoplasmic domain of CD40. The similarity between a specific region of TRAF3 with regions of TRAF1 and TRAF2 define a "TRAF-C" domain that is necessary and sufficient for CD40 binding and homodimerization.

REFERENCES

- 1. Tartaglia, L.A. and Goeddel, D.V. 1992. Two TNF receptors. Immunol. Today 13: 151-153.
- Smith, C.A., Farrah, T., and Goodwin, R.G. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. Cell 76: 959-962.
- Rothe, M., Wong, S.C., Henzel, W.J., and Goeddel, D.V. 1994. A novel family of putative signal transducers associated with the cytoplasmic domain of the 75 kDa tumor necrosis factor receptor. Cell 78: 681-692.
- Hu, H.M., O'Rourke, K., Boguski, M.S., and Dixit, V.M. 1994. A novel RING finger protein interacts with the cytoplasmic domain of CD40. J. Biol. Chem. 269: 30069-30072.
- Cheng, G., Cleary, A.M., Ye, Z.-s., Hong, D.I., Lederman, S., and Baltimore, D. 1995. Involvement of CRAF1, a relative of TRAF, in CD40 signaling. Science 267: 1494-1498.
- Mosiaios, G., Birkenbach, M., Yalamanchili, R., VanArsdale, T., Ware, C., and Kieff, E. 1995. The Epstein-Barr virus transforming protein LMP1 engages signaling proteins for the tumor necrosis factor receptor family. Cell 80: 389-399.
- 7. Hsu, H., Xiong, J., and Goeddel, D.V. 1995. The TNF receptor 1-associated protein TRADD signals cell death and NFκB activation. Cell 81: 495-504.

SOURCE

TRAF3 (322-444) is expressed in *E. coli* as a 41 kDa tagged fusion protein corresponding to amino acids 322-444 mapping at the carboxy terminus of TRAF3 (also designated CRAF1) of human origin.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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

PRODUCT

TRAF3 (322-444) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μ g in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

TRAF3 (322-444) is suitable as a Western blotting control for sc-1828 and sc-6933.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com