A20 (A-12): sc-166692

**BACKGROUND**

A20 is a Cys2/Cys2 zinc finger protein that is induced by a variety of inflammatory stimuli and regulates gene expression. Specifically, A20 is induced by tumor necrosis factor (TNF) and interleukin 1 (IL-1) and acts as a negative regulator of nuclear factor-κB (NFκB) gene expression. By inhibiting NFκB activation, A20 plays a critical role in terminating NFκB responses to various stimuli. Although the C-terminal region of A20 contains seven zinc finger domains, only four of these domains are required for *in vitro* inhibition of TNF-induced NFκB activation. A20 also interacts with several other proteins, such as TRAF2, TRAF6, and IκB kinase (IKK) γ protein, and thereby can inhibit cell death. In addition, the novel A20-binding protein TXB1P151 may mediate the anti-apoptotic activity of A20. Involved in the negative feedback regulation of signal transduction, A20 and A20-binding proteins may be useful as novel therapeutic tools in the treatment of a variety of diseases.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TNFAIP3 (human) mapping to 6q23.3; Tnfaip3 (mouse) mapping to 10 A3.

**SOURCE**

A20 (A-12) is a mouse monoclonal antibody raised against amino acids 1-100 of A20 of human origin.

**PRODUCT**

Each vial contains 200 μg IgGκ kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-166692 X, 200 μg/0.1 ml.

A20 (A-12) is available conjugated to agarose (sc-166692 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166692 HRP), 200 μg/ml, for WB, IHC (P) and ELISA; to either phycocerythrin (sc-166692 PE), fluorescein (sc-166692 FITC), Alexa Fluor® 488 (sc-166692 AF488), Alexa Fluor® 546 (sc-166692 AF546), Alexa Fluor® 594 (sc-166692 AF594) or Alexa Fluor® 647 (sc-166692 AF647), 200 μg/ml, for WB (RGB), IF, IHC (P) and FCM; and to either Alexa Fluor® 680 (sc-166692 AF680) or Alexa Fluor® 790 (sc-166692 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**STORAGE**

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

**APPLICATIONS**

A20 (A-12) is recommended for detection of A20 of mouse, rat, and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], 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).


A20 (A-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of A20: 90 kDa.

**DATA**

A20 (A-12): sc-166692. Western blot analysis of A20 expression in Jurkat (A) and B cells (B) whole cell lysates and NIH/3T3 (C) and KNRK (D) nuclear extracts.

A20 (A-12): sc-166692. Immunoperoxidase staining of glandular cells and lymphoid cells (A) and weak cytoplasmic staining of macrophages (B).

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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