

T3JAM (B-7): sc-398781

BACKGROUND

T3JAM (TRAF3 interacting protein 3), also known as TRAF3-interacting JNK-activating modulator or TRAF3IP3, is a 551 amino acid single-pass type IV membrane protein that acts as an adaptor molecule and stimulates cell growth by modulating the c-Jun N-terminal kinase (JNK) pathway in conjunction with TRAF3. Expressed in thymus, bone marrow and spleen, T3JAM binds the isoleucine zipper of TRAF3 with its coiled-coil domain. T3JAM has been found to associate specifically with TRAF3 but not with other TRAF family members. As a result of alternative splicing events, three T3JAM isoforms exist. The gene encoding T3JAM maps to human chromosome 1, which spans about 260 million base pairs and comprises nearly 8% of the human genome. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

- Dadgostar, H., et al. 2003. T3JAM, a novel protein that specifically interacts with TRAF3 and promotes the activation of JNK1. *FEBS Lett.* 553: 403-407.
- Zhang, C., et al. 2007. TRAF3 interacts with Smac/DIABLO and enhances the proapoptotic effect of Smac/DIABLO in cytoplasm. *Acta Biochim. Biophys. Sin.* 39: 108-116.
- Ma, X., et al. 2007. Identification of five human novel genes associated with cell proliferation by cell-based screening from an expressed cDNA ORF library. *Life Sci.* 81: 1141-1151.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 608255. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Balcárková, J., et al. 2009. Gain of chromosome arm 1q in patients in relapse and progression of multiple myeloma. *Cancer Genet. Cytogenet.* 192: 68-72.

CHROMOSOMAL LOCATION

Genetic locus: TRAF3IP3 (human) mapping to 1q32.2.

SOURCE

T3JAM (B-7) is a mouse monoclonal antibody raised against amino acids 161-370 mapping within a cytoplasmic domain of T3JAM of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

T3JAM (B-7) is available conjugated to agarose (sc-398781 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398781 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398781 PE), fluorescein (sc-398781 FITC), Alexa Fluor® 488 (sc-398781 AF488), Alexa Fluor® 546 (sc-398781 AF546), Alexa Fluor® 594 (sc-398781 AF594) or Alexa Fluor® 647 (sc-398781 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398781 AF680) or Alexa Fluor® 790 (sc-398781 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

T3JAM (B-7) is recommended for detection of T3JAM isoforms 1-3 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for T3JAM siRNA (h): sc-78894, T3JAM shRNA Plasmid (h): sc-78894-SH and T3JAM shRNA (h) Lentiviral Particles: sc-78894-V.

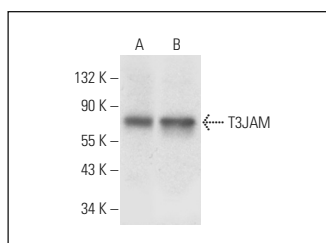
Molecular Weight of T3JAM: 64 kDa.

Positive Controls: human thymus extract: sc-516711, Jurkat whole cell lysate: sc-2204 or human spleen extract: sc-363779.

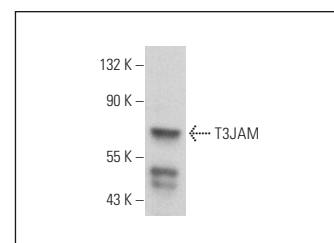
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



T3JAM (B-7): sc-398781. Western blot analysis of T3JAM expression in human spleen (A) and human thymus (B) tissue extracts.



T3JAM (B-7): sc-398781. Western blot analysis of T3JAM expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

- Yu, X., et al. 2018. Metabolic control of regulatory T cell stability and function by TRAF3IP3 at the lysosome. *J. Exp. Med.* 215: 2463-2476.

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.

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