

# TRABID (F-1): sc-374377

## BACKGROUND

TRABID (TRAF-binding domain-containing protein), also known as ZRANB1 (zinc finger Ran-binding domain-containing protein 1), is a 708 amino acid cytoplasmic and nuclear protein that is widely expressed. Belonging to the peptidase C64 family, TRABID is considered a positive regulator of the Wnt signaling pathway that specifically cleaves "Lys-63"-linked ubiquitin chains. TRABID acts by deubiquitinating APC, a negative regulator of Wnt-mediated transcription. TRABID contains a OTU domain, which mediates the deubiquitinating activity, and three RanBP2-type zinc fingers that mediate the specific interaction with "Lys-63"-linked ubiquitin. It is suggested that TRABID may also modulate TNF $\alpha$  signaling. The gene encoding TRABID is located on chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome.

## REFERENCES

- Evans, P.C., et al. 2001. Isolation and characterization of two novel A20-like proteins. *Biochem. J.* 357: 617-623.
- Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. *Nature* 429: 375-381.
- Komander, D. and Barford, D. 2008. Structure of the A20 OTU domain and mechanistic insights into deubiquitination. *Biochem. J.* 409: 77-85.
- Tran, H., et al. 2008. Trabid, a new positive regulator of Wnt-induced transcription with preference for binding and cleaving K63-linked ubiquitin chains. *Genes Dev.* 22: 528-542.
- Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611749. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: ZRANB1 (human) mapping to 10q26.13; Zranb1 (mouse) mapping to 7 F3.

## SOURCE

TRABID (F-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 679-709 near the C-terminus of TRABID of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-374377 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## STORAGE

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

## APPLICATIONS

TRABID (F-1) is recommended for detection of TRABID of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 TRABID siRNA (h): sc-90499, TRABID siRNA (m): sc-154577, TRABID shRNA Plasmid (h): sc-90499-SH, TRABID shRNA Plasmid (m): sc-154577-SH, TRABID shRNA (h) Lentiviral Particles: sc-90499-V and TRABID shRNA (m) Lentiviral Particles: sc-154577-V.

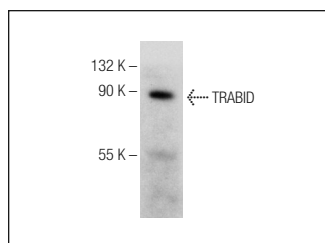
Molecular Weight of TRABID: 81 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or HEK293 whole cell lysate: sc-45136.

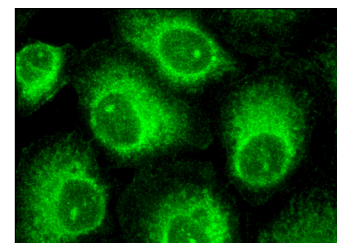
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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



TRABID (F-1): sc-374377. Western blot analysis of TRABID expression in HeLa whole cell lysate.



TRABID (F-1): sc-374377. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.