

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 α 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

1. Evans, P.C., et al. 2001. Isolation and characterization of two novel A20-like proteins. *Biochem. J.* 357: 617-623.
2. Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. *Nature* 429: 375-381.
3. Komander, D. and Barford, D. 2008. Structure of the A20 OTU domain and mechanistic insights into deubiquitination. *Biochem. J.* 409: 77-85.
4. 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.
5. 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 μ 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 μ 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 μ g per 100-500 μ 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.

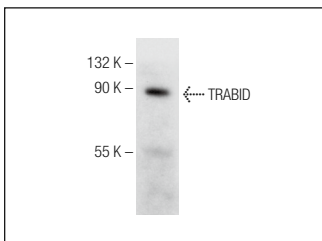
Molecular Weight of TRABID: 81 kDa.

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

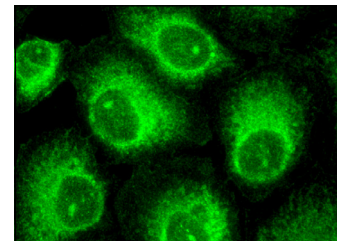
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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 κ BP-FITC: sc-516140 or m-IgG κ 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 for detailed protocols and support products.