

# Cables2 (T-15): sc-87636

## BACKGROUND

Cables2 (Cdk5 and ABL1 enzyme substrate 2), also known as Ik3-2, is a 478 amino acid ubiquitously expressed protein that has a C-terminal cyclin box-containing domain, making it a member of the cyclin protein superfamily. A related protein, Cables, forms a trimolecular complex with Cdk5 and c-Abl *in vivo*, enhances apoptosis induced by overexpression of p53 and may be a tumor suppressor, due to its chromosomal loss of heterozygosity that is found in certain cancers. Cables2 shares 78% sequence similarity with Cables in the region of the cyclin box-containing domain and, in similar functionality, associates with Cdk3, Cdk5 and c-Abl. However, unlike its close relative, Cables2 also contains an N-terminal region that enhances not only p53-mediated cell death, but also p53-independent cell death. This characteristic suggests that the gene encoding Cables2 may also function as a tumor suppressor gene.

## REFERENCES

1. Yamochi, T., et al. 2001. Ik3-1/Cables is associated with TRAP and PCTAIRE-2. *Biochem. Biophys. Res. Commun.* 286: 1045-1050.
2. Yamochi, T., et al. 2001. Ik3-1/Cables is a substrate for cyclin-dependent kinase 3. *Eur. J. Biochem.* 268: 6076-6082.
3. Sato, H., et al. 2002. Ik3-2, a relative to Ik3-1/Cables, is associated with Cdk3, Cdk5 and c-Abl. *Biochim. Biophys. Acta* 1574: 157-163.
4. Tsuji, K., et al. 2002. Differential effect of Ik3-1/Cables on p53- and p73-induced cell death. *J. Biol. Chem.* 277: 2951-2957.
5. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc. Natl. Acad. Sci. USA* 99: 16899-16903.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609194. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: CABLES2 (human) mapping to 20q13.33.

## SOURCE

Cables2 (T-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Cables2 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87636 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Cables2 (T-15) is recommended for detection of Cables2 of human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with family member Cables1.

Suitable for use as control antibody for Cables2 siRNA (h): sc-72771, Cables2 shRNA Plasmid (h): sc-72771-SH and Cables2 shRNA (h) Lentiviral Particles: sc-72771-V.

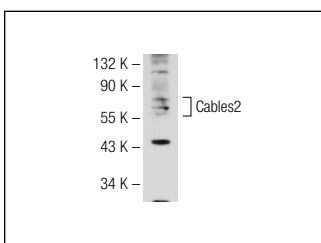
Molecular Weight of Cables2: 60 kDa.

Positive Controls: Ramos cell lysate: sc-2216.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Cables2 (T-15): sc-87636. Western blot analysis of Cables2 expression in Ramos whole cell lysate.

## 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) or our catalog for detailed protocols and support products.


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Try **Cables2 (D-6): sc-376272**, our highly recommended monoclonal alternative to Cables2 (T-15).