

# CDIP (Q-16): sc-242405

## BACKGROUND

CDIP (cell death-inducing protein), also known as transmembrane protein I1, LITAF-like protein or C16orf5, is a 208 amino acid protein that is highly expressed in brain, with lower levels found in liver, heart, skeletal muscle, pancreas and kidney. A member of the LITAF family, CDIP localizes to the nucleus and functions as a p53 apoptotic effector. The gene encoding CDIP maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

## REFERENCES

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- Bhalla, K., et al. 1999. C16orf5, a novel proline-rich gene at 16p13.3, is highly expressed in the brain. *J. Hum. Genet.* 44: 383-387.
- Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
- Haupt, S., et al. 2003. Apoptosis—the p53 network. *J. Cell Sci.* 116: 4077-4085.
- Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. *Curr. Gastroenterol. Rep.* 6: 467-473.
- Mathew, C.G. and Lewis, C.M. 2004. Genetics of inflammatory bowel disease: progress and prospects. *Hum. Mol. Genet.* 13: R161-R168.
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## CHROMOSOMAL LOCATION

Genetic locus: C16orf5 (human) mapping to 16p13.3; 5730403B10Rik (mouse) mapping to 16 A1.

## SOURCE

CDIP (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CDIP of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242405 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

CDIP (Q-16) is recommended for detection of CDIP of mouse, rat and 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).

CDIP (Q-16) is also recommended for detection of CDIP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CDIP siRNA (h): sc-93100, CDIP siRNA (m): sc-142224, CDIP shRNA Plasmid (h): sc-93100-SH, CDIP shRNA Plasmid (m): sc-142224-SH, CDIP shRNA (h) Lentiviral Particles: sc-93100-V and CDIP shRNA (m) Lentiviral Particles: sc-142224-V.

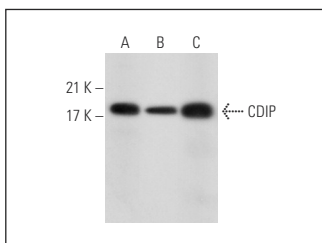
Molecular Weight of CDIP: 22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Sol8 cell lysate: sc-2249 or rat liver extract: sc-2395.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CDIP (Q-16): sc-242405. Western blot analysis of CDIP expression in HeLa (A) and Sol8 (B) whole cell lysates and rat liver tissue extract (C).

## STORAGE

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

## PROTOCOLS

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