

# CLYBL (C-20): sc-84061

## BACKGROUND

The citrate lyase subunit  $\beta$ -like protein (CLYBL) is a 340 amino acid protein that localizes to the mitochondrion where it binds 1 magnesium ion per subunit. The gene encoding human CLYBL maps to chromosome 13, which contains around 114 million base pairs and 400 genes. Key tumor suppressor genes on chromosome 13 include the breast cancer susceptibility gene, BRCA2, and the RB1 (retinoblastoma) gene. RB1 encodes a crucial tumor suppressor protein which, when defective, leads to malignant growth in the retina and has been implicated in a variety of other cancers. The gene SLITRK1, which is associated with Tourette syndrome, is on chromosome 13. As with most chromosomes, polysomy of part or all of chromosome 13 is deleterious to development and decreases the odds of survival. Trisomy 13, also known as Patau syndrome, is quite deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CLYBL (human) mapping to 13q32.3.

## SOURCE

CLYBL (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of CLYBL of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84061 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CLYBL (C-20) is recommended for detection of CLYBL of human and rat origin by Western Blotting (starting dilution 1:200, 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).

CLYBL (C-20) is also recommended for detection of CLYBL in additional species, including canine and porcine.

Suitable for use as control antibody for CLYBL siRNA (h): sc-105218, CLYBL shRNA Plasmid (h): sc-105218-SH and CLYBL shRNA (h) Lentiviral Particles: sc-105218-V.

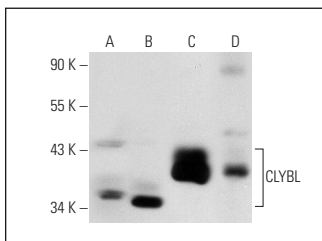
Molecular Weight of CLYBL: 37 kDa.

Positive Controls: CLYBL (h): 293T Lysate: sc-113856 or HeLa whole cell lysate: sc-2200.

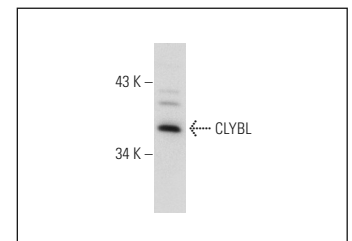
## RECOMMENDED SECONDARY REAGENTS

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



CLYBL (C-20): sc-84061. Western blot analysis of CLYBL expression in non-transfected 293T: sc-117752 (A), human CLYBL transfected 293T: sc-113856 (B) and LADMAC (C) whole cell lysates and mouse liver tissue extract (D).



CLYBL (C-20): sc-84061. Western blot analysis of CLYBL expression in HeLa whole cell lysate.

## 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.