

# CLN2 (G-16): sc-34866

## BACKGROUND

CLN2, also known as tripeptidyl peptidase I (TTP-I), a member of the family of serine-carboxyl proteinases (S53), plays a crucial role in lysosomal protein degradation, and a deficiency in this enzyme leads to fatal neurodegenerative disease. CLN2 is a lysosomal aminopeptidase that sequentially removes tripeptides from small polypeptides and also shows a minor endoprotease activity. In lysosomes, CLN2 proenzyme is converted into a mature enzyme with the assistance of another protease and is able to autoactivate in acidic pH *in vitro* via an unimolecular mechanism.

## REFERENCES

1. Golabek, A.A., et al. 2004. Maturation of human tripeptidyl peptidase I *in vitro*. J. Biol. Chem. 279: 31058-31067.
2. Golabek, A.A., et al. 2005. Glycosaminoglycans modulate activation, activity and stability of tripeptidyl peptidase I *in vitro* and *in vivo*. J. Biol. Chem. 280: 7550-7561.

## CHROMOSOMAL LOCATION

Genetic locus: TPP1 (human) mapping to 11p15.4; Tpp1 (mouse) mapping to 7 E3.

## SOURCE

CLN2 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CLN2 of rat 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-34866 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CLN2 (G-16) is recommended for detection of CLN2 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).

CLN2 (G-16) is also recommended for detection of CLN2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CLN2 siRNA (h): sc-45578, CLN2 siRNA (m): sc-45579, CLN2 shRNA Plasmid (h): sc-45578-SH, CLN2 shRNA Plasmid (m): sc-45579-SH, CLN2 shRNA (h) Lentiviral Particles: sc-45578-V and CLN2 shRNA (m) Lentiviral Particles: sc-45579-V.

Molecular Weight of CLN2 precursor: 68 kDa.

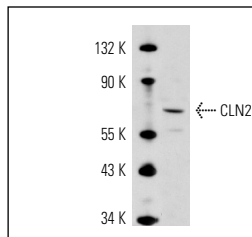
Molecular Weight of mature CLN2: 48 kDa.

Positive Controls: mouse heart extract: sc-2254.

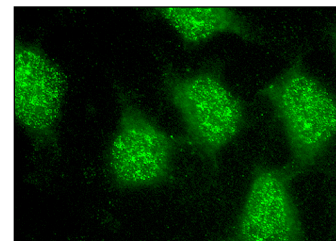
## RECOMMENDED SECONDARY REAGENTS

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



CLN2 (G-16): sc-34866. Western blot analysis of CLN2 expression in mouse heart tissue extract.



CLN2 (G-16): sc-34866. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

## 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.

## 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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Satisfaction  
Guaranteed

Try **CLN2 (G-3): sc-393961** or **CLN2 (D-11): sc-365838**, our highly recommended monoclonal alternatives to CLN2 (G-16).