

CLN2 (H-300): sc-66836



The Power to Question

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 (H-300) is a rabbit polyclonal antibody raised against amino acids 264-563 mapping at the C-terminus of CLN2 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.

APPLICATIONS

CLN2 (H-300) 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), immunohistochemistry (including paraffin-embedded sections) (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 (H-300) is also recommended for detection of CLN2 in additional species, including 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.

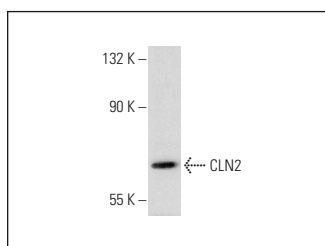
Molecular Weight of mature CLN2: 48 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, mouse heart extract: sc-2254 or JAR cell lysate: sc-2276.

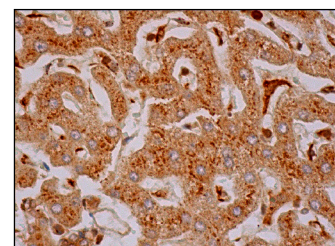
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



CLN2 (H-300): sc-66836. Western blot analysis of CLN2 expression in CCRF-CEM whole cell lysate.



CLN2 (H-300): sc-66836. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes and bile duct cells and cytoplasmic and nuclear staining of Kupffer cells.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **CLN2 (G-3): sc-393961** or **CLN2 (D-11): sc-365838**, our highly recommended monoclonal alternatives to CLN2 (H-300).