

Calmegin (V-25): sc-133440

BACKGROUND

Calmegin, belonging to the calreticulin family, is expressed in testis as an endoplasmic reticulum membrane protein, where it acts as a chaperone protein and plays a role in spermatogenesis. Calmegin is a single-pass type I membrane protein that is transcriptionally regulated in coordination by CpG methyltransferase and histone deacetylase (HDAC). First expressed in meiotic prophase of spermatocytes, Calmegin facilitates sperm-egg zona pellicuda binding through association with sperm membrane proteins (fertilin α and β). A loss in Calmegin results in male sterility. However, if the zona pellicuda is partially dissected and fertilized *in vitro*, the egg will develop normally.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CLGN (human) mapping to 4q31.1.

SOURCE

Calmegin (V-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic Calmegin peptide of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Calmegin (V-25) is recommended for detection of Calmegin 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Calmegin siRNA (h): sc-60316, Calmegin shRNA Plasmid (h): sc-60316-SH and Calmegin shRNA (h) Lentiviral Particles: sc-60316-V.

Molecular Weight (predicted) of Calmegin: 70 kDa.

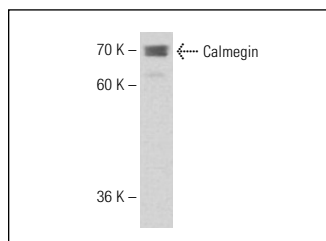
Molecular Weight (observed) of Calmegin: 69 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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).

DATA



Calmegin (V-25): sc-133440. Western blot analysis of Calmegin expression in Hep G2 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.



Try **Calmegin (B-11): sc-515251**, our highly recommended monoclonal alternative to Calmegin (V-25).