

# CLAMP (N-20): sc-85487

## BACKGROUND

CLAMP, also known as SPEF1 (sperm flagellar protein 1), is an 236 amino acid protein that is present in epididymal sperm and localizes to the cell projection, as well as to the cytoplasm. Expressed in lung, brain and testis, CLAMP functions as a microtubule-associated protein that is thought to play a role in microtubule bundling. Human CLAMP exists as two alternatively spliced isoforms and shares a high degree of homology with its mouse counterpart, suggesting a conserved role between species. The gene encoding CLAMP maps to human chromosome 20, which houses over 600 genes and comprises nearly 2% of the human genome.

## REFERENCES

1. Maccioni, R.B. and Cambiazo, V. 1995. Role of microtubule-associated proteins in the control of microtubule assembly. *Physiol. Rev.* 75: 835-864.
2. Deloukas, P., et al. 2001. The DNA sequence and comparative analysis of human chromosome 20. *Nature* 414: 865-871.

## CHROMOSOMAL LOCATION

Genetic locus: SPEF1 (human) mapping to 20p13; Spef1 (mouse) mapping to 2 F1.

## SOURCE

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-85487 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CLAMP (N-20) is recommended for detection of CLAMP 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).

CLAMP (N-20) is also recommended for detection of CLAMP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CLAMP siRNA (h): sc-72914, CLAMP siRNA (m): sc-142360, CLAMP shRNA Plasmid (h): sc-72914-SH, CLAMP shRNA Plasmid (m): sc-142360-SH, CLAMP shRNA (h) Lentiviral Particles: sc-72914-V and CLAMP shRNA (m) Lentiviral Particles: sc-142360-V.

Molecular Weight (predicted) of CLAMP: 27 kDa.

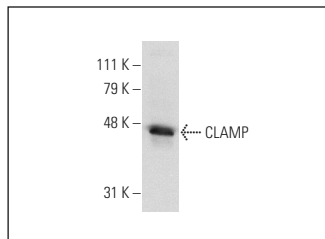
Molecular Weight (observed) of CLAMP: 40-47 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or mouse testis extract: sc-2405.

## 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



CLAMP (N-20): sc-85487. Western blot analysis of CLAMP expression in mouse testis tissue extract.

## 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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Try **CLAMP (G-3): sc-398342** or **CLAMP (E-9): sc-374099**, our highly recommended monoclonal alternatives to CLAMP (N-20).