SANTA CRUZ BIOTECHNOLOGY, INC.

Calpain 11 (H-60): sc-50503

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Calpains are calcium-activated thiol proteases. They are heterodimers with one large subunit and one small subunit. The large subunit varies between family members and can be active without the small subunit. Calpains are involved in intracellular processing of proteins. Calpain 11 is a typical calpain with four domains, but in place of the typical domain IV, Calpain 11 has a similar calmodulin-like domain that associates, but does not interact with, the smaller regulatory subunit. Calpain 11 is found in the testis, localizing to the spermatozoa during the later stages of meiosis. It is expressed during spermatogenesis, which suggests that during meiosis and sperm functional processes, Calpain 11 may regulate calcium-dependent signal transduction events.

CHROMOSOMAL LOCATION

Genetic locus: CAPN11 (human) mapping to 6p21.1; Capn11 (mouse) mapping to 17 B3.

SOURCE

Calpain 11 (H-60) is a rabbit polyclonal antibody raised against amino acids 1-60 mapping at the N-terminus of Calpain 11 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.

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.

APPLICATIONS

Calpain 11 (H-60) is recommended for detection of Calpain 11 of mouse 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).

Suitable for use as control antibody for Calpain 11 siRNA (h): sc-62058, Calpain 11 siRNA (m): sc-62059, Calpain 11 shRNA Plasmid (h): sc-62058-SH, Calpain 11 shRNA Plasmid (m): sc-62059-SH, Calpain 11 shRNA (h) Lentiviral Particles: sc-62058-V and Calpain 11 shRNA (m) Lentiviral Particles: sc-62059-V.

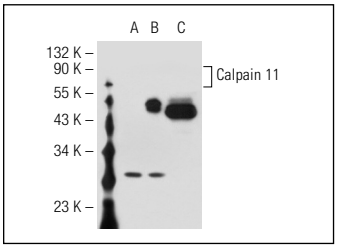
Molecular Weight of Calpain 11: 81 kDa.

Positive Controls: mouse testis extract: sc-2405, Calpain 11 (h): 293T Lysate: sc-115046 or Calpain 11 (m): 293 Lysate: sc-178352.

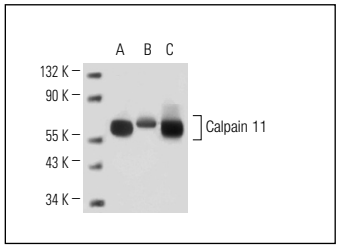
RECOMMENDED SECONDARY REAGENTS

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.

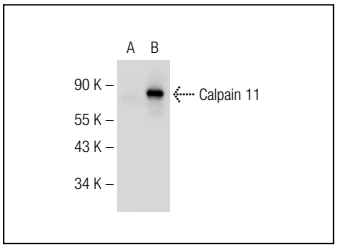
DATA



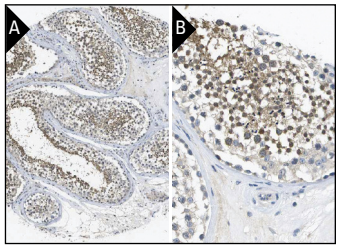
Calpain 11 (H-60): sc-50503. Western blot analysis of Calpain 11 expression in non-transfected 293T: sc-117752 (**A**) and human Calpain 11 transfected 293T: sc-115046 (**B**) whole cell lysates and mouse testis tissue extract (**C**).



Calpain 11 (H-60): sc-50503. Western blot analysis of Calpain 11 expression in mouse testis (**A**), rat testis (**B**), and mouse thymus (**C**) tissue extracts.



Calpain 11 (H-60): sc-50503. Western blot analysis of Calpain 11 expression in non-transfected: sc-110760 (**A**) and mouse Calpain 11 transfected: sc-178352 (**B**) 293 whole cell lysates.



Calpain 11 (H-60): sc-50503. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferus ducts at low (**A**) and high (**B**) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **Calpain 11 (C-2): sc-376265** or **Calpain 11 (C-10): sc-376213**, our highly recommended monoclonal alternatives to Calpain 11 (H-60).