

# SPAM1 (M-40): sc-99023

## BACKGROUND

Hyaluronidases (HAases or HYALs) are a family of lysosomal enzymes that are crucial for the spread of bacterial infections and of toxins present in a variety of venoms. HYALs may also be involved in the progression of cancer. In humans, six members of the hyaluronidase family have been identified. These proteins are significant in the degradation of hyaluronic acid (HA), which is present in body fluids, tissues and the extracellular matrix of vertebrate tissues. HA keeps tissues hydrated, maintains osmotic balance and promotes cell proliferation, differentiation and metastasis. HA is also an important structural component of cartilage and other tissues and acts as a lubricant in joints. SPAM1 (sperm adhesion molecule 1), also designated Hyal-PH20 or sperm surface protein PH-20, was formerly referred to as HYAL1 (HYA1). The current nomenclature references the functional hyaluronidase activity of SPAM1 to permit acrosome-intact sperm to penetrate through the HA-rich cumulus cell layer surrounding the oocyte. SPAM1 is also implicated in intracellular signaling and zona pellucida binding. SPAM1 is found in the epididymis and in testis, more specifically in plasma and acrosomal membranes of sperm. SPAM1 is a structurally unique hyaluronidase in that it is a GPI-anchored protein.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Spam1 (mouse) mapping to 6 A3.1.

## SOURCE

SPAM1 (M-40) is a rabbit polyclonal antibody raised against amino acids 231-270 mapping within an internal region of SPAM1 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

SPAM1 (M-40) is recommended for detection of SPAM1 of mouse and rat 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).

Suitable for use as control antibody for SPAM1 siRNA (m): sc-153709, SPAM1 shRNA Plasmid (m): sc-153709-SH and SPAM1 shRNA (m) Lentiviral Particles: sc-153709-V.

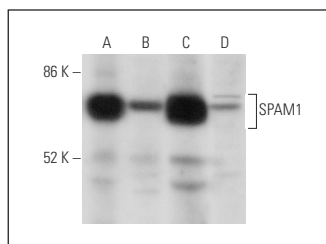
Molecular Weight of SPAM1: 67 kDa.

Positive Controls: mouse testis extract: sc-2405, mouse heart extract: sc-2254 or F9 cell lysate: sc-2245.

## 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



SPAM1 (M-40): sc-99023. Western blot analysis of SPAM1 expression in mouse prostate (A), mouse testis (B) and mouse heart (C) tissue extracts and F9 whole cell lysate (D).

## 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.