

# HYAL1 (4F9): sc-101341

## 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 HYAL proteins have been identified. Most HYAL proteins degrade 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. HYAL1 is a 435 amino acid hyaluronidase that is expressed in multiple tissues, specifically in the serum, and is not expressed in brain. HYAL1 degrades HA into fragments that stimulate angiogenesis. Expression of HYAL1 in various cancer cells may have a role in the regulation of tumor growth and progression.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: HYAL1 (human) mapping to 3p21.31; Hyal1 (mouse) mapping to 9 F1.

## SOURCE

HYAL1 (4F9) is a mouse monoclonal antibody raised against amino acids 1-366 of HYAL1 of human origin.

## 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.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

HYAL1 (4F9) is recommended for detection of amino acids 330-634 of HYAL1 of mouse, rat, human and hamster origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]; non cross-reactive with HYAL2 or HYAL3.

Suitable for use as control antibody for HYAL1 siRNA (h): sc-78054, HYAL1 siRNA (m): sc-60823, HYAL1 shRNA Plasmid (h): sc-78054-SH, HYAL1 shRNA Plasmid (m): sc-60823-SH, HYAL1 shRNA (h) Lentiviral Particles: sc-78054-V and HYAL1 shRNA (m) Lentiviral Particles: sc-60823-V.

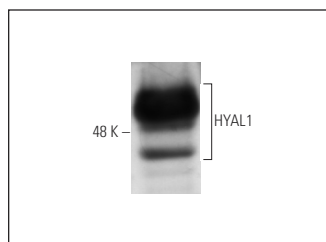
Molecular Weight of HYAL1: 60 kDa.

Positive Controls: BHK whole cell lysate.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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



HYAL1 (4F9): sc-101341. Western blot analysis of HYAL1 expression in BHK whole cell lysate.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.