

# SASPase (Q-13): sc-162146

## BACKGROUND

SASPase (skin aspartic protease), also known as skin-specific retroviral-like aspartic protease, ASPRV1 (aspartic peptidase, retroviral-like 1), MUNO, SASP or TAPS (TPA-inducible aspartic proteinase-like protein), is a 343 amino acid single-pass membrane protein that resembles certain aspartyl proteases containing retroviral-type signatures. Expressed in the inner root sheath of hair follicles and the granular layer of epidermis, SASPase is suggested to be involved in keratinocyte differentiation and is known to catalyze the hydrolysis of casein and the oxidized B chain of Insulin. SASPase exists as a homodimer that undergoes posttranslational autocleavage to become activated. Containing one peptidase A2 domain, SASPase is encoded by a gene that maps to human chromosome 2p13.3.

## REFERENCES

1. von der Helm, K. 1996. Retroviral proteases: structure, function and inhibition from a non-anticipated viral enzyme to the target of a most promising HIV therapy. *Biol. Chem.* 377: 765-774.
2. Dunn, B.M., et al. 2002. Retroviral proteases. *Genome Biol.* 3: reviews3006.
3. Bernard, D., et al. 2005. Identification and characterization of a novel retroviral-like aspartic protease specifically expressed in human epidermis. *J. Invest. Dermatol.* 125: 278-287.
4. Rhiemeier, V., et al. 2006. A novel aspartic proteinase-like gene expressed in stratified epithelia and squamous cell carcinoma of the skin. *Am. J. Pathol.* 168: 1354-1364.
5. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611765. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: ASPRV1 (human) mapping to 2p13.3; *Asprv1* (mouse) mapping to 6 D1.

## SOURCE

SASPase (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of SASPase 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.

Blocking peptide available for competition studies, sc-162146 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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

SASPase (Q-13) is recommended for detection of SASPase 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).

SASPase (Q-13) is also recommended for detection of SASPase in additional species, including canine and porcine.

Suitable for use as control antibody for SASPase siRNA (h): sc-94271, SASPase siRNA (m): sc-153229, SASPase shRNA Plasmid (h): sc-94271-SH, SASPase shRNA Plasmid (m): sc-153229-SH, SASPase shRNA (h) Lentiviral Particles: sc-94271-V and SASPase shRNA (m) Lentiviral Particles: sc-153229-V.

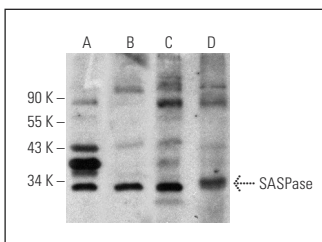
Molecular Weight of SASPase: 37 kDa.

Positive Controls: T24 cell lysate: sc-2292, mouse brain extract: sc-2253 or mouse thymus extract: sc-2406.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



SASPase (Q-13): sc-162146. Western blot analysis of SASPase expression in T24 (A) and LADMAC (B) whole cell lysates and mouse brain (C) and mouse thymus (D) tissue extracts.

## PROTOCOLS

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