

SASPase (C-13): sc-162144

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., Goodenow, M.M., Gustchina and A., Wlodawer, A. 2002. Retroviral proteases. *Genome Biol.* 3: reviews3006.
3. Bernard, D., Mehul, B., Thomas-Collignon, A., Delattre, C., Donovan and M., Schmidt, R. 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., Breitenbach, U., Richter, K.H., Gebhardt, C., Vogt, I., Hartenstein, B., Fürstenberger, G., Mauch, C., Hess and J., Angel, P. 2006. A novel aspartic proteinase-like gene expressed in stratified epithelia and squamous cell carcinoma of the skin. *Am. J. Pathol.* 168: 1354-1364.
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CHROMOSOMAL LOCATION

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

SOURCE

SASPase (C-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-162144 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

SASPase (C-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), 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 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.

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) 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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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