SANTA CRUZ BIOTECHNOLOGY, INC.

Histatin (H-40): sc-98945

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Histatin 1 is a histidine-rich phosphoprotein present in human parotid saliva that possesses candidacidal activity and functions in mineralization by adsorbing to hydroxyapatite. Phosphorylation of histatin 1 contributes to its ability to bind hydroxyapatite. Salivary histatins are a family of small histidine-rich peptides with potent antifungal activity. Submandibular and sublingual histatin secretion levels may affect the status of yeast present in the mouth. As a result, histatins have been implicated as potential therapeutic agents against oral candidiasis. A decrease in salivary histatins in relation to total salivary protein is common in old age and can influence the ability of the oral host defense system to address pathogens.

REFERENCES

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5. Tamaki, N., et al. 2002. Comparison of inhibitory activity on calcium phosphate precipitation by acidic proline-rich proteins, statherin, and histatin-1. Calcif. Tissue Int. 71: 59-62.
6. Li, X.S., et al. 2003. *Candida albicans* Ssa1/2p is the cell envelope binding protein for human salivary histatin 5. J. Biol. Chem. 278: 28553-28561.
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8. Castagnola, M., et al. 2004. A cascade of 24 histatins (histatin 3 fragments) in human saliva. Suggestions for a pre-secretory sequential cleavage pathway. J. Biol. Chem. 279: 41436-41443.
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CHROMOSOMAL LOCATION

Genetic locus: HTN1 (human) mapping to 4q13.3.

SOURCE

Histatin (H-40) is a rabbit polyclonal antibody raised against amino acids 18-57 mapping at the C-terminus of Histatin of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

Histatin (H-40) is recommended for detection of Histatin 1 and 2, and to a lesser extent, Histatin 3 of 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).

Molecular Weight of Histatin: 7 kDa.

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.

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.