

Pepsin A4 (h): 293T Lysate: sc-171136

BACKGROUND

Pepsin is one of the main proteolytic enzymes secreted by the gastric mucosa. Pepsin consists of a single polypeptide chain and arises from its precursor, pepsinogen, by removal of a 41 amino acid segment from the N-terminus. Pepsinogen is synthesized in the stomach lining, and hydrochloric acid, also produced by the gastric mucosa, is necessary to convert the inactive enzyme and to maintain the optimum acidity (pH 1-3) for pepsin function. Pepsin is particularly effective in cleaving peptide bonds involving aromatic amino acids. Pepsin shows extremely broad specificity; although bonds involving phenylalanine and leucine are preferred, many others are also cleaved to some extent. Pepsin A is a member of the subfamily A1 within the pepsin family and is the predominant endopeptidase in the gastric juice of vertebrates. Pepsin A is inhibited by ovUS-1, a uterine serpin.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: PGA4 (human) mapping to 11q12.2.

PRODUCT

Pepsin A4 (h): 293T Lysate represents a lysate of human Pepsin A4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Pepsin A4 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Pepsin A4 antibodies. Recommended use: 10-20 µl per lane.

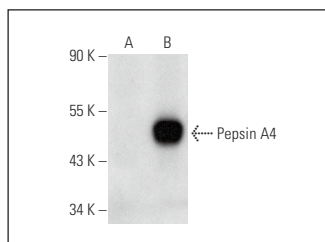
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Pepsin A (A-10): sc-271798 is recommended as a positive control antibody for Western Blot analysis of enhanced human Pepsin A4 expression in Pepsin A4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

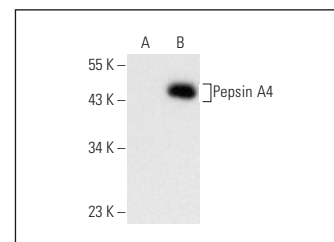
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Pepsin A (A-10): sc-271798. Western blot analysis of Pepsin A4 expression in non-transfected: sc-110760 (A) and human Pepsin A4 transfected: sc-171136 (B) 293 whole cell lysates.



Pepsin A (D-5): sc-365680. Western blot analysis of Pepsin A4 expression in non-transfected: sc-110760 (A) and human Pepsin A4 transfected: sc-171136 (B) 293 whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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