SANTA CRUZ BIOTECHNOLOGY, INC.

nardilysin (A-8): sc-514955

BACKGROUND

Aspartyl, serine, thiol and metalloenzyme proteases can be endoproteases, which activate protein precursors by cleavage at basic residues. Human nardilysin, also designated N-arginine dibasic convertase, NRD1 or NRD convertase, is a 1,147 amino acid metalloendopeptidase that cleaves propeptide and proprotein substrates at the amino-terminus of arginine residues in dibasic moieties. The nardilysin gene maps to chromosome 1p32.3 and is expressed as a 3.6-kb transcript primarily in adult heart, skeletal muscle and testis. In the testis, nardilysin appears to be restricted to germ cells. As a member of the Insulinase family, nardilysin is a specific receptor for heparin-binding epidermal growth factor-like growth factor (HB-EGF) that modulates HB-EGF-induced cell migration via ErbB1. Nardilysin exhibits a significant degree of similarity to Insulinase and to two yeast processing enzymes, Axl1 and Ste2. Defects in the gene encoding nardilysin are linked to inherited neuromuscular disorders.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NRDC (human) mapping to 1p32.3; Nrd1 (mouse) mapping to 4 C7.

SOURCE

nardilysin (A-8) is a mouse monoclonal antibody raised against amino acids 381-680 mapping within an internal region of nardilysin of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

nardilysin (A-8) is recommended for detection of nardilysin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for nardilysin siRNA (h): sc-41550, nardilysin siRNA (m): sc-41551, nardilysin shRNA Plasmid (h): sc-41550-SH, nardilysin shRNA Plasmid (m): sc-41551-SH, nardilysin shRNA (h) Lentiviral Particles: sc-41550-V and nardilysin shRNA (m) Lentiviral Particles: sc-41551-V.

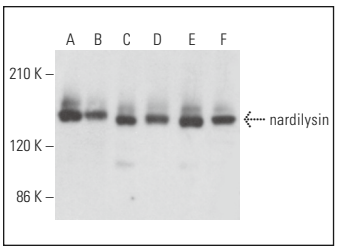
Molecular Weight of nardilysin: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or MIA PaCa-2 cell lysate: sc-2285.

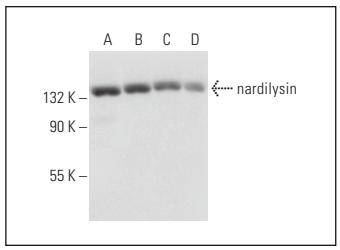
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



nardilysin (A-8): sc-514955. Western blot analysis of nardilysin expression in HeLa (**A**), Caki-1 (**B**), NIH/3T3 (**C**), NTERA-2 cl.D1 (**D**), NCI-H460 (**E**) and F9 (**F**) whole cell lysates.



nardilysin (A-8): sc-514955. Western blot analysis of nardilysin expression in HeLa (**A**), K-562 (**B**), MIA PaCa-2 (**C**) and LNCaP (**D**) whole cell lysates.

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.