

Renalase (H-241): sc-366165

BACKGROUND

Renalase is a 342 amino acid FAD-dependent amine oxidase that is highly expressed in kidney and is expressed at a lower level in heart, skeletal muscle and small intestine. Renalase is secreted in the blood by the kidney and it is thought to regulate cardiac function and systemic blood pressure. It is also suggested that Renalase functions as a hormone that metabolizes circulating catecholamines, which have an active role in the sympathetic and parasympathetic nervous systems. Individuals with chronic kidney disease and end-stage renal disease have markedly reduced levels of plasma Renalase than healthy individuals. Infusion of Renalase in animal models causes decrease in heart rate, cardiac contractility and blood pressure. Two isoforms of Renalase exist due to alternative splicing events.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: RNLS (human) mapping to 10q23.31.

SOURCE

Renalase (H-241) is a rabbit polyclonal antibody raised against amino acids 37-277 mapping within an internal region of Renalase 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.

APPLICATIONS

Renalase (H-241) is recommended for detection of Renalase 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).

Renalase (H-241) is also recommended for detection of Renalase in additional species, including bovine and porcine.

Suitable for use as control antibody for Renalase siRNA (h): sc-76384, Renalase siRNA (m): sc-76385, Renalase shRNA Plasmid (h): sc-76384-SH, Renalase shRNA Plasmid (m): sc-76385-SH, Renalase shRNA (h) Lentiviral Particles: sc-76384-V and Renalase shRNA (m) Lentiviral Particles: sc-76385-V.

Molecular Weight of Renalase: 38 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.

RESEARCH USE

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