SANTA CRUZ BIOTECHNOLOGY, INC.

NESP55 (FL-245): sc-98548

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NESP55 (neuroendocrine secretory protein 55), also known as AHO, GSA, GSP, POH, GPSA, NESP, GNAS1, PHP1A or PHP1B, is a 245 amino acid precursor protein that is proteolytically processed to yield a number of active peptides that localize to neuroendocrine secretory granules and have diverse roles throughout the body. Defects or genetic variations in the NESP55 gene are associated with the pathogenesis of a variety of disorders, including ACTH-independent macronodular adrenal hyperplasia (AIMAH), Albright hereditary osteodystrophy, polyostotic fibrous dysplasia of bone, McCune-Albright syndrome, pseudohypoparathyroidis, pseudopseudohypoparathyroidism, progressive osseus heteroplasia and pituitary tumors.

REFERENCES

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2. Levine, M.A., et al. 1991. Mapping of the gene encoding the α subunit of the stimulatory G protein of adenylyl cyclase (GNAS1) to 20q13.2—q13.3 in human by *in situ* hybridization. Genomics 11: 478-479.
3. Weinstein, L.S., et al. 1991. Activating mutations of the stimulatory G protein in the McCune-Albright syndrome. N. Engl. J. Med. 325: 1688-1695.
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6. Ahmed, S.F., et al. 2002. GNAS1 mutations and progressive osseous heteroplasia. N. Engl. J. Med. 346: 1669-1671.
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8. Diaz, A., et al. 2007. McCune-Albright syndrome and disorders due to activating mutations of GNAS1. J. Pediatr. Endocrinol. Metab. 20: 853-880.
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CHROMOSOMAL LOCATION

Genetic locus: GNAS (human) mapping to 20q13.32; Gnas (mouse) mapping to 2 H4.

SOURCE

NESP55 (FL-245) is a rabbit polyclonal antibody raised against amino acids 1-245 representing full length NESP55 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

NESP55 (FL-245) is recommended for detection of NESP55 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).

NESP55 (FL-245) is also recommended for detection of NESP55 in additional species, including equine and canine.

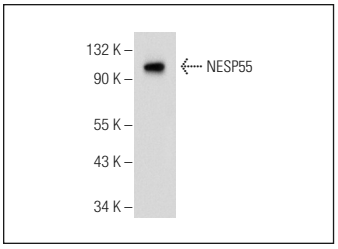
Molecular Weight of NESP55 precursor: 28 kDa.

Positive Controls: Ramos cell lysate: sc-2216.

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.

DATA



NESP55 (FL-245): sc-98548. Western blot analysis of NESP55 expression in Ramos whole cell lysate.

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.