SANTA CRUZ BIOTECHNOLOGY, INC.

# ARHGEF9 (N-12): sc-167129

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

ARHGEF9 (Rho guanine nucleotide exchange factor 9), also known as PEM-2 homolog or collybistin, is a 516 amino acid cytoplasmic protein. ARHGEF9 acts as a guanine nucleotide exchange factor for Cdc42 and promotes formation of Gephyrin clusters by directly interacting with gephyrin. ARHGEF9 contains one DH (DBL-homology) domain, one PH domain and one SH3 domain. Defects in the gene encoding ARHGEF9 are a believed to be a cause for startle disease with epilepsy (STHEE), also known as hyperekplexia with epilepsy. This disease is a heterogenous neurological disorder characterized by muscular rigidity, particularly in the neonatal period, and a startle response to auditory or tactile stimuli.

## REFERENCES


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## CHROMOSOMAL LOCATION

Genetic locus: ARHGEF9 (human) mapping to Xq11.1; Arhgef9 (mouse) mapping to X C3.

## SOURCE

ARHGEF9 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ARHGEF9 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.

Blocking peptide available for competition studies, sc-167129 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARHGEF9 (N-12) is recommended for detection of ARHGEF9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other ARHGEF family members.

ARHGEF9 (N-12) is also recommended for detection of ARHGEF9 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for ARHGEF9 siRNA (h): sc-91036, ARHGEF9 siRNA (m): sc-141229, ARHGEF9 shRNA Plasmid (h): sc-91036-SH, ARHGEF9 shRNA Plasmid (m): sc-141229-SH, ARHGEF9 shRNA (h) Lentiviral Particles: sc-91036-V and ARHGEF9 shRNA (m) Lentiviral Particles: sc-141229-V.

Molecular Weight of ARHGEF9: 62 kDa.

Positive Controls: rat cerebrum tissue extract.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.

## RESEARCH USE

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

## PROTOCOLS

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