## SANTA CRUZ BIOTECHNOLOGY, INC.

# KIAA1033 (N-20): sc-139583



BACKGROUND

KIAA1033 is a 1,173 amino acid protein that belongs to the WASHS7 family. KIAA1033 is a component of the WASH complex, which is a complex found at the surface of endosomes. The WASH complex recruits and acitvates Arp2/3 to induce actin polymerization. This complex is important for the fission of tubules that act as transport intermediates for the sorting of endosomes. Proteins that comprise the WASH complex include F-actin capping protein subunit  $\alpha$  (CapZ- $\alpha$ 1/2 or 3), F-actin subunit  $\beta$  (CapZ- $\beta$ ), WASH (FAM39E, WASH2/3/4/5P or 6P), FAM21 (A/B or C), CCDC53, Strumpellin and KIAA1033. KIAA1033 contains one coiled coil domain and is post-translationally phosphorylated at serine 7. KIAA1033 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 12q23.3. Chromosome 12 encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

## REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: KIAA1033 (human) mapping to 12q23.3; A230046K03Rik (mouse) mapping to 10 C1.

#### SOURCE

KIAA1033 (N-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of KIAA1033 of human origin.

## PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139583 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

KIAA1033 (N-20) is recommended for detection of KIAA1033 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KIAA1033 (N-20) is also recommended for detection of KIAA1033 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for KIAA1033 siRNA (h): sc-96101, KIAA1033 siRNA (m): sc-146450, KIAA1033 shRNA Plasmid (h): sc-96101-SH, KIAA1033 shRNA Plasmid (m): sc-146450-SH, KIAA1033 shRNA (h) Lentiviral Particles: sc-96101-V and KIAA1033 shRNA (m) Lentiviral Particles: sc-146450-V.

Molecular Weight of KIAA1033 isoforms: 136/99 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) Immunofluo-rescence: 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.

#### **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.