SANTA CRUZ BIOTECHNOLOGY, INC.

# SPA-L2 (K-14): sc-137784

## BACKGROUND

SPA-L2, also known as SIPA1L2 (signal-induced proliferation-associated 1-like protein 2), is a 1,722 amino acid protein that contains one PDZ (DHR) domain and one Rap-GAP domain, and exists as 2 alternatively spliced isoforms. The gene that encodes SPA-L2 consists of approximately 163,594 bases and maps to human chromosome 1q42.2. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

## REFERENCES


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2. Eudy, J.D., et al. 1998. Isolation of a gene encoding a novel member of the nuclear receptor superfamily from the critical region of Usher syndrome type IIa at 1q41. Genomics 50: 382-384.
3. Bowling, E.L., et al. 2000. The Stickler syndrome: case reports and literature review. Optometry. 71: 177-182.
4. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.
5. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
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8. Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. Am. J. Psychiatry 166: 206-215.
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## CHROMOSOMAL LOCATION

Genetic locus: SIPA1L2 (human) mapping to 1q42.2; Sipa1l2 (mouse) mapping to 8 E2.

## SOURCE

SPA-L2 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SPA-L2 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-137784 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SPA-L2 (K-14) is recommended for detection of SPA-L2 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 SPA-1 or SPA-L3.

SPA-L2 (K-14) is also recommended for detection of SPA-L2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SPA-L2 siRNA (h): sc-78800, SPA-L2 siRNA (m): sc-153694, SPA-L2 shRNA Plasmid (h): sc-78800-SH, SPA-L2 shRNA Plasmid (m): sc-153694-SH, SPA-L2 shRNA (h) Lentiviral Particles: sc-78800-V and SPA-L2 shRNA (m) Lentiviral Particles: sc-153694-V.

Molecular Weight of SPA-L2 isoforms: 190/85 kDa.

## 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.