

# Limkain b1 (D-14): sc-139264

## BACKGROUND

Limkain b1 (LKAP), also known as KIAA0430 or 4921513D23Rik, is a 1,741 amino acid protein that localizes to the peroxisome. Limkain b1 has been found to interact with LIMK-2, a protein that may be important for cell fate determination and growth control. Limkain b1 contains one RRM (RNA recognition motif) domain, indicating that Limkain b1 may bind single-stranded RNA. Limkain b1 is expressed as six isoforms produced by alternative splicing events. The gene that encodes Limkain b1 maps to human chromosome 16, which encodes over 900 genes in approximately 90 million base pairs, making up nearly 3% of human cellular DNA. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene.

## REFERENCES

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3. Loftus, B.J., et al. 1999. Genome duplications and other features in 12 Mb of DNA sequence from human chromosome 16p and 16q. *Genomics* 60: 295-308.
4. Brandenberger, R., et al. 2004. Transcriptome characterization elucidates signaling networks that control human ES cell growth and differentiation. *Nat. Biotechnol.* 22: 707-716.
5. Dunster, K., et al. 2005. Limkain b1, a novel human autoantigen localized to a subset of ABCD3 and PXF marked peroxisomes. *Clin. Exp. Immunol.* 140: 556-563.
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7. King, K., et al. 2007. Identification, evolution, and association study of a novel promoter and first exon of the human NOD2 (CARD15) gene. *Genomics* 90: 493-501.
8. Gervasini, C., et al. 2007. High frequency of mosaic CREBBP deletions in Rubinstein-Taybi syndrome patients and mapping of somatic and germ-line breakpoints. *Genomics* 90: 567-573.
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## CHROMOSOMAL LOCATION

Genetic locus: 4921513D23Rik (mouse) mapping to 16 A1.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## SOURCE

Limkain b1 (D-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Limkain b1 of mouse origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139264 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Limkain b1 (D-14) is recommended for detection of Limkain b1 of mouse and rat 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).

Limkain b1 (D-14) is also recommended for detection of Limkain b1 in additional species, including canine.

Suitable for use as control antibody for Limkain b1 siRNA (m): sc-146728, Limkain b1 shRNA Plasmid (m): sc-146728-SH and Limkain b1 shRNA (m) Lentiviral Particles: sc-146728-V.

Molecular Weight of Limkain b1: 192 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) 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.