

LRBA (C-18): sc-164907

BACKGROUND

LRBA (LPS-responsive vesicle trafficking, beach and anchor containing), also known as beige-like protein, CDC4L (cell division cycle 4-like protein), LAB300, GL or LBA, is a 2,863 amino acid single-pass membrane protein of the endoplasmic reticulum, lysosome and Golgi apparatus. Ubiquitously expressed and existing as two alternatively spliced isoforms, LRBA plays a role in polarized vesicle trafficking and signal transduction. LRBA contains six WD repeats, a BEACH domain and is induced by LPS. LRBA undergoes post-translational phosphorylation in response to DNA damage, most likely by ATR or Atm. The gene encoding LRBA maps to human chromosome 4, which represents approximately 6% of the human genome, contains nearly 900 genes and is associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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2. Kalchman, M.A., et al. 1996. Huntingtin is ubiquitinated and interacts with a specific ubiquitin-conjugating enzyme. *J. Biol. Chem.* 271: 19385-19394.
3. Krakow, D., et al. 2000. Exclusion of the Ellis-van Creveld region on chromosome 4p16 in some families with asphyxiating thoracic dystrophy and short-rib polydactyly syndromes. *Eur. J. Hum. Genet.* 8: 645-648.
4. Wang, J.W., et al. 2001. Identification of a novel lipopolysaccharide-inducible gene with key features of both A kinase anchor proteins and chs1/beige proteins. *J. Immunol.* 166: 4586-4595.
5. Sommardahl, C., et al. 2001. Phenotypic variations of orpk mutation and chromosomal localization of modifiers influencing kidney phenotype. *Physiol. Genomics* 7: 127-134.
6. Dyomin, V.G., et al. 2002. BCL8 is a novel, evolutionarily conserved human gene family encoding proteins with presumptive protein kinase A anchoring function. *Genomics* 80: 158-165.
7. Dobson, C.M., et al. 2002. Identification of the gene responsible for the cblA complementation group of vitamin B12-responsive methylmalonic acidemia based on analysis of prokaryotic gene arrangements. *Proc. Natl. Acad. Sci. USA* 99: 15554-15559.
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CHROMOSOMAL LOCATION

Genetic locus: LRBA (human) mapping to 4q31.3; Lrba (mouse) mapping to 3 F1.

SOURCE

LRBA (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LRBA 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.

Blocking peptide available for competition studies, sc-164907 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRBA (C-18) is recommended for detection of LRBA 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).

LRBA (C-18) is also recommended for detection of LRBA in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for LRBA siRNA (h): sc-89238, LRBA siRNA (m): sc-149029, LRBA shRNA Plasmid (h): sc-89238-SH, LRBA shRNA Plasmid (m): sc-149029-SH, LRBA shRNA (h) Lentiviral Particles: sc-89238-V and LRBA shRNA (m) Lentiviral Particles: sc-149029-V.

Molecular Weight of LRBA isoforms: 319/318 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.

PROTOCOLS

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