

## RLBP1L2 (C-18): sc-244021

### BACKGROUND

RLBP1L2 (retinaldehyde binding protein 1-like 2), also known as CLVS2 (clavesin 2), is a 327 amino acid protein that contains one CRAL-TRIO domain. RLBP1L2's CRAL-TRIO domain is required for targeting to the membrane and for binding phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P<sub>2</sub>). It has been suggested that RLBP1L2 is required for normal morphology of late endosomes and possibly lysosomes in neurons. The RLBP1L2 protein forms a complex with clathrin heavy chain and  $\gamma$ -adaptin. Existing as two alternatively spliced isoforms, the RLBP1L2 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish and mosquito, and maps to human chromosome 6q22.31. Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. A bipolar disorder susceptibility locus has also been identified on the q arm of chromosome 6.

### REFERENCES

- Weitkamp, L.R., et al. 1981. Depressive disorders and HLA: a gene on chromosome 6 that can affect behavior. *N. Engl. J. Med.* 305: 1301-1306.
- Rice, J.P., et al. 1997. Initial genome scan of the NIMH genetics initiative bipolar pedigrees: chromosomes 1, 6, 8, 10, and 12. *Am. J. Med. Genet.* 74: 247-253.
- Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
- McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. *Am. J. Hum. Genet.* 77: 582-595.
- Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. *Genes Chromosomes Cancer* 47: 159-164.
- Katoh, Y., et al. 2009. The clavesin family, neuron-specific lipid- and clathrin-binding Sec14 proteins regulating lysosomal morphology. *J. Biol. Chem.* 284: 27646-27654.

### CHROMOSOMAL LOCATION

Genetic locus: CLVS2 (human) mapping to 6q22.31; Clvs2 (mouse) mapping to 10 A4.

### SOURCE

RLBP1L2 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RLBP1L2 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244021 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

RLBP1L2 (C-18) is recommended for detection of RLBP1L2 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).

RLBP1L2 (C-18) is also recommended for detection of RLBP1L2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RLBP1L2 siRNA (h): sc-95286, RLBP1L2 siRNA (m): sc-152981, RLBP1L2 shRNA Plasmid (h): sc-95286-SH, RLBP1L2 shRNA Plasmid (m): sc-152981-SH, RLBP1L2 shRNA (h) Lentiviral Particles: sc-95286-V and RLBP1L2 shRNA (m) Lentiviral Particles: sc-152981-V.

Molecular Weight of RLBP1L2 isoforms 1/2: 38/21 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](http://www.scbt.com) or our catalog for detailed protocols and support products.