

Rabbit RLBP1 Polyclonal Antibody | anti-RLBP1 antibody

Anti-RLBP1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127297	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

RLBP1; Polyclonal Antibody; Anti-RLBP1 Antibody Picoband; Zinc finger protein Helios; POU class 4 homeobox 1; POU domain; class 4; transcription factor 1; anti-RLBP1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in the brain and the retina. Present in the developing brain, spinal cord and eye.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-RLBP1 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human RLBP1 recombinant protein (Position: E3-D288).
Subcellular Localization	Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Multifunctional transcription factor with different regions mediating its different effects. Acts by binding (via its C-terminal domain) to sequences related to the consensus octamer motif 5'-ATGCAAAT-3' in the regulatory regions of its target genes. Regulates the expression of specific genes involved in differentiation and survival within a subset of neuronal lineages. It has been shown that activation of some of these genes requires its N-terminal domain, maybe through a neuronal-specific cofactor. Activates BCL2 expression and protects neuronal cells from apoptosis (via the N-terminal domain). Induces neuronal process outgrowth and the coordinate expression of genes encoding synaptic proteins. Exerts its major developmental effects in somatosensory neurons and in brainstem nuclei involved in motor control. Stimulates the binding affinity of the nuclear estrogen receptor ESR1 to DNA estrogen response element (ERE), and hence modulates ESR1-induced transcriptional activity. May positively regulate POU4F2 and POU4F3. Regulates dorsal root ganglion sensory neuron specification and axonal projection into the spinal cord. Plays a role in TNFSF11-mediated terminal osteoclast differentiation. Negatively regulates its own expression interacting ly with a highly conserved autoregulatory domain surrounding the transcription initiation site.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HepG2 cells using anti-RLBP1 antibody (AAA127297). Overlay histogram showing HepG2 cells stained with AAA127297 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-RLBP1 Antibody (AAA127297, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



WB (Western Blot)

Figure 1. Western blot analysis of RLBP1 using anti-RLBP1 antibody (AAA127297). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat eye tissue lysates, Lane 2: mouse eye tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-RLBP1 antigen affinity purified polyclonal antibody (#AAA127297) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for RLBP1 at approximately 36 kDa. The expected band size for RLBP1 is at 36 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-RLBP1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-RLBP1 antibody	Primary Antibodies; Cell Type Marker; Developmental Families; Domain Families; Epigenetics and Nuclear Signaling; Neurogenesis; Neurology Process; Neuroscience; Transcription
References	1. Bear, J. C., Nemec, T. F., Kennedy, J. C., Marshall, W. H., Power, A. A., Kolonel, V. M., Burke, G. B. Inbreeding in outport Newfoundland. Am. J. Med. Genet. 29: 649-660, 1988. 2. Burstedt, M. S., Sandgren, O., Holmgren, G., Forsman-Semb, K. Bothnia dystrophy caused by mutations in the cellular retinaldehyde-binding protein gene (RLBP1) on chromosome 15q26. Invest. Ophthalm. Vis. Sci. 40: 995-1000, 1999. 3. Burstedt, M. S. I., Forsman-Semb, K., Golovleva, I., Janunger, T., Wachtmeister, L., Sandgren, O. Ocular phenotype of Bothnia dystrophy, an autosomal recessive retinitis pigmentosa associated with an R234W mutation in the RLBP1 gene. Arch Ophthalm. 119: 260-267, 2001.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506541
NCBI GeneID	6017
NCBI Accession #	NP_000317.1
NCBI GenBank Nucleotide #	NM_000326.4
UniProt Accession #	P12271; B2R667
Molecular Weight	36,474 Da
NCBI Official Full Name	retinaldehyde-binding protein 1
NCBI Official Synonym Full Names	retinaldehyde binding protein 1
NCBI Official Symbol	RLBP1
NCBI Official Synonym Symbols	CRALBP
NCBI Protein Information	retinaldehyde-binding protein 1; cellular retinaldehyde-binding protein; cellular retinaldehyde-binding protein-1
UniProt Protein Name	Retinaldehyde-binding protein 1
UniProt Gene Name	RLBP1
UniProt Synonym Gene Names	CRALBP

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/rbp1-antibody-flow-cytometry-western-blot-elisa/127297>