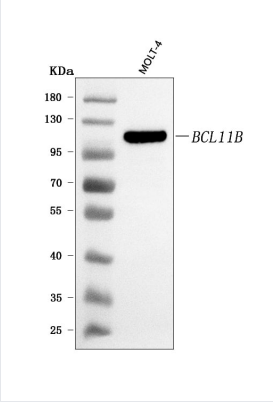
BCL11B Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

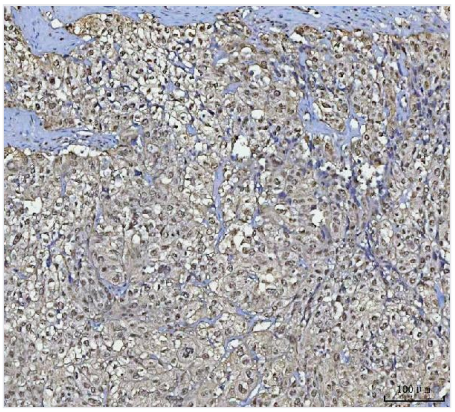
Product Name	BCL11B, Polyclonal Antibody
Full Product Name	Anti-BCL11B Antibody Picoband
Product Gene Name	anti-BCL11B antibody
Product Synonym Names	ATP-binding cassette sub-family G member 8; flap structure-specific endonuclease 1; Flap endonuclease 1; FEN-1; DNase IV; Flap structure-specific endonuclease 1; Maturation factor 1; MF1; hFEN-1
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human, Rat
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	PredominantlyExpressed in the liver (PubMed:11099417, PubMed:11452359). Low expression levels in the small intestine and colon (PubMed:11099417). Very low levels in other tissues, including brain, heart and spleen (PubMed:11452359).
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.
Molecular Weight	95519 MW
OMIM	AJ404614 mRNA
3D Structure	ModBase 3D Structure for Q9C0K0
Immunogen	E coli-derived human BCL11B recombinant protein (Position: Q10-A628).
Subcellular Localization	Membrane, Multi-pass membrane protein
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	Structure-specific nuclease with 5'-flap endonuclease and 5'-3' exonuclease activities involved in DNA replication and repair. During DNA replication, cleaves the 5'-overhanging flap structure that is generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment. It enters the flap from the 5'-end and then tracks to cleave the flap base, leaving a nick for ligation. Also involved in the long patch base excision repair (LP-BER) pathway, by cleaving within the apurinic/apyrimidinic (AP) site-terminated flap. Acts as a genome stabilization factor that prevents flaps from equilibrating into structurs that lead to duplications and deletions. Also possesses 5'-3' exonuclease activity on nicked or gapped double-stranded DNA, and exhibits RNase H activity. Also involved in replication and repair of rDNA and in repairing mitochondrial DNA.
Product Categories/Family for anti-BCL11B antibody	Primary Antibodies; Atherosclerosis; Cancer; Cancer Metabolism; Cardiovascular; Cholesterol Metabolism; Heart Disease; Lipid and Lipoprotein Metabolism; Lipid Metabolism; Lipids/Lipoproteins; Metabolic Signaling Pathway; Metabolic Signaling Pathways; Meta
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-BCL11B antibody	ELISA (EIA), Flow Cytometry (FC/FACS), Immunofluorescence (IF), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Western Blot (WB)

Application Notes for anti-BCL11B antibody	WB: 0.1-0.25ug/ml, Human IHC(Paraffin-embedded Section): 2-5ug/ml, Human ICC/IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug /1x10^6 cells, Rat ELISA: 0.1-0.5ug/ml
Related Product Information for anti-BCL11B 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 References and Citations for anti-BCL11B antibody	1. Arlotta, P., Molyneaux, B. J., Chen, J., Inoue, J., Kominami, R., Macklis, J. D. Neuronal subtype-specific genes that control corticospinal motor neuron development in vivo. Neuron 45: 207-221, 2005.2. Avram, D., Fields, A., Top, K. P. O., Nevrivy, D. J., Ishmael, J. E., Leid, M. Isolation of a novel family of C2H2 zinc finger proteins implicated in transcriptional repression mediated by chicken ovalbumin upstream promoter transcription factor (COUP-TF) orphan nuclear receptors. J. Biol. Chem. 275: 10315-10322, 2000. 3. Chen, B., Wang, S. S., Hattox, A. M., Rayburn, H., Nelson, S. B., McConnell, S. K. The Fezf2-Ctip2 genetic pathway regulates the fate choice of subcortical projection neurons in the developing cerebral cortex. Proc. Nat. Acad. Sci. 105: 11382-11387, 2008.
Other Notes	Small volumes of anti-BCL11B antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for BCL11B purchase	MBS1758198 is an antibody targeting BCL11B. Also known as Anti-BCL11B Antibody Picoband. Reactive in Human, Rat. Host: Rabbit.



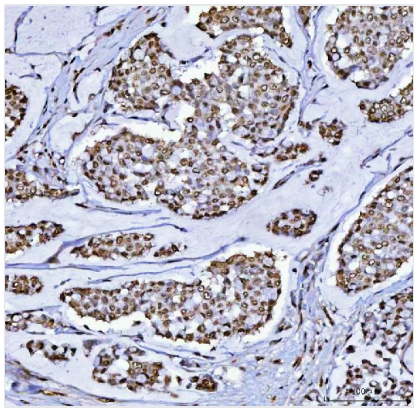
Western Blot (WB) of anti-BCL11B antibody

Figure 1. Western blot analysis of BCL11B using anti-BCL11B antibody (MBS1758198).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: human MOLT-4 whole cell 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-BCL11B antigen affinity purified polyclonal antibody (#MBS1758198) at 0.25ug/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 (#MBS176460) with Tanon 5200 system. A specific band was detected for BCL11B at approximately 116 kDa. The expected band size for BCL11B is at 96 kDa.



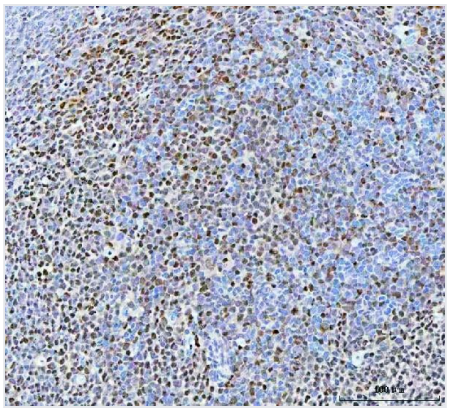
Immunohistochemistry (IHC) of anti-BCL11B antibody

Figure 2. IHC analysis of BCL11B using anti-BCL11B antibody (MBS1758198).BCL11B was detected in a paraffin-embedded section of human bladder urothelial carcinoma with squamous differentiation tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-BCL11B Antibody (MBS1758198) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.



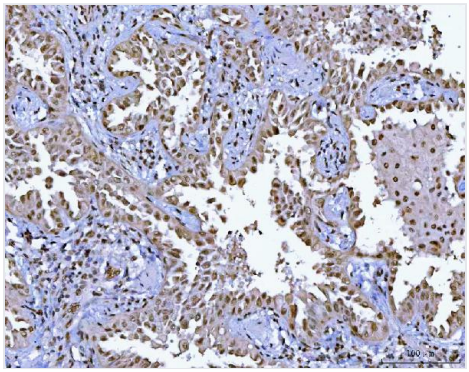
Immunohistochemistry (IHC) of anti-BCL11B antibody

Figure 3. IHC analysis of BCL11B using anti-BCL11B antibody (MBS1758198).BCL11B was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-BCL11B Antibody (MBS1758198) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.



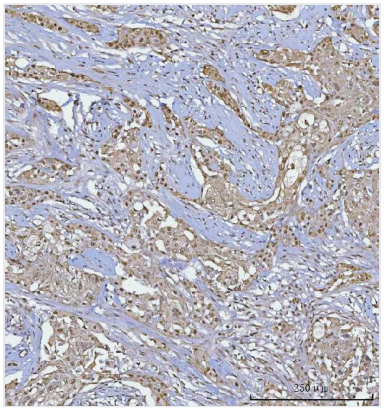
Immunohistochemistry (IHC) of anti-BCL11B antibody

Figure 4. IHC analysis of BCL11B using anti-BCL11B antibody (MBS1758198).BCL11B was detected in a paraffin-embedded section of human chronic tonsillitis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-BCL11B Antibody (MBS1758198) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.



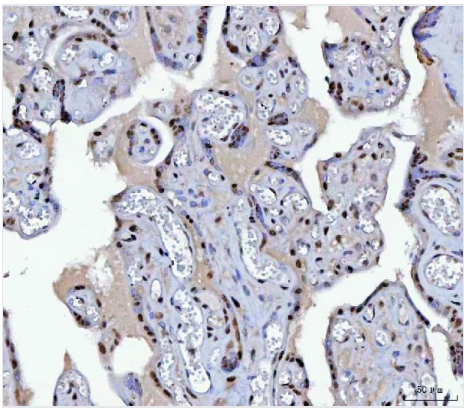
Immunohistochemistry (IHC) of anti-BCL11B antibody

Figure 5. IHC analysis of BCL11B using anti-BCL11B antibody (MBS1758198).BCL11B was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-BCL11B Antibody (MBS1758198) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.

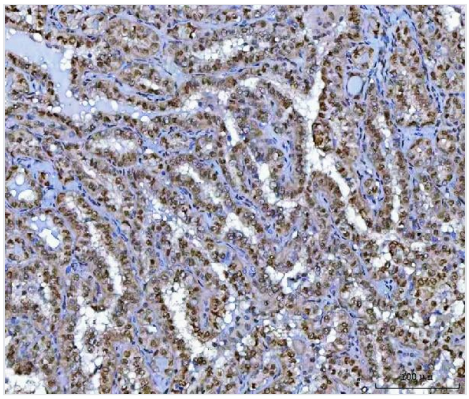


Immunohistochemistry (IHC) of anti-BCL11B antibody

Figure 6. IHC analysis of BCL11B using anti-BCL11B antibody (MBS1758198).BCL11B was detected in a paraffin-embedded section of human lymph node metastasis carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-BCL11B Antibody (MBS1758198) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-BCL11B antibody
Figure 7. IHC analysis of BCL11B using anti-BCL11B antibody (MBS1758198).BCL11B was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-BCL11B Antibody (MBS1758198) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-BCL11B antibody
Figure 8. IHC analysis of BCL11B using anti-BCL11B antibody (MBS1758198).BCL11B was detected in a paraffin-embedded section of human thyroid papillary carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-BCL11B Antibody (MBS1758198) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (#MBS176453) with DAB as the chromogen.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for BCL11B. It may not necessarily be applicable to this product.

NCBI GI #	532691787
NCBI GeneID	64919
NCBI Accession #	NP_001269166.1
UniProt Primary Accession #	Q9C0K0
UniProt Secondary Accession #	Q9H162
UniProt Related Accession #	Q9C0K0
GenBank Nucleotide #	NM_001282237.1
NCBI Official Full Name	B-cell lymphoma/leukemia 11B isoform 3
NCBI Official Synonym Full Names	B cell CLL/lymphoma 11B
NCBI Official Symbol	BCL11B
NCBI Official Synonym Symbols	ATL1; RIT1; CTIP2; IMD49; CTIP-2; ZNF856B; ATL1-beta; ATL1-alpha; ATL1-delta; ATL1-gamma; hRIT1-alpha
UniProt Protein Name	B-cell lymphoma/leukemia 11B
UniProt Synonym Protein Names	B-cell CLL/lymphoma 11B; COUP-TF-interacting protein 2; Radiation-induced tumor suppressor gene 1 protein; hRit1
Protein Family	B-cell lymphoma/leukemia
UniProt Gene Name	BCL11B
UniProt Synonym Gene Names	CTIP2; RIT1; BCL-11B; hRit1
NCBI Protein Information	B-cell lymphoma/leukemia 11B
NCBI Summary for BCL11B	This gene encodes a C2H2-type zinc finger protein and is closely related to BCL11A, a gene whose translocation may be associated with B-cell malignancies. Although the specific function of this gene has not been determined, the encoded protein is known to be a transcriptional repressor, and is regulated by the NURD nucleosome remodeling and histone deacetylase complex. Four alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Aug 2013]

UniProt Comments for BCL11B	Key regulator of both differentiation and survival of T-lymphocytes during thymocyte development in mammals. Essential in controlling the responsiveness of hematopoietic stem cells to chemotactic signals by modulating the expression of the receptors CCR7 and CCR9, which direct the movement of progenitor cells from the bone marrow to the thymus (PubMed:27959755). Is a regulator of IL2 promoter and enhances IL2 expression in activated CD4+ T-lymphocytes (PubMed:16809611). Tumor-suppressor that represses transcription through direct, TFCOUP2-independent binding to a GC-rich response element (). May also function in the P53-signaling pathway ().
Research Articles on BCL11B	**1.** this is the first study to show that the inhibition of Bcl11b suppresses glioma cell growth by regulating the expression of the cell cycle regulator p21 and stemness-associated genes (Sox-2/Bmi-1).
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-rat-antibody/bcl11b/1758198