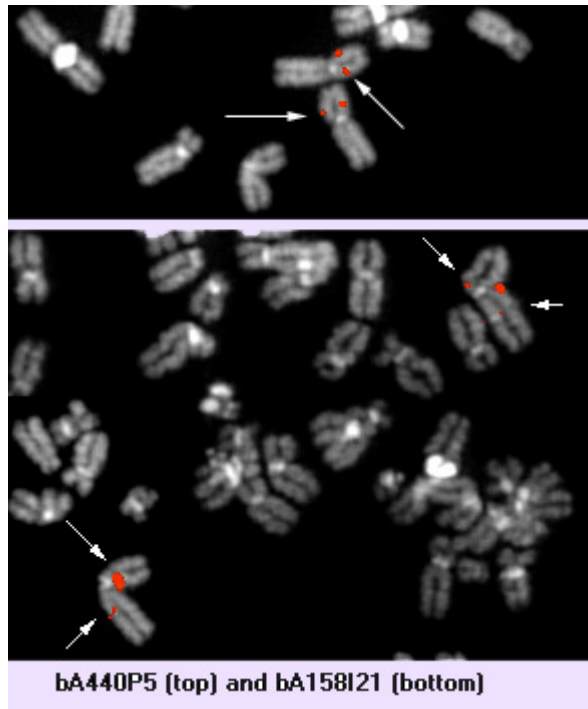


## BCL11A (B-cell lymphoma/leukemia 11A)

### Identity

Hugo [BCL11A](#)

Location 2p13-15



[BCL11A](#) (2p15) - Courtesy Mariano Rocchi, [Resources for Molecular Cytogenetics](#). Laboratories willing to validate the probes are welcome : contact [rocchi@biologia.uniba.it](mailto:rocchi@biologia.uniba.it)

### DNA/RNA



Description 5 exons, with a CpG island in 5' of the gene

Transcription the major transcript is the longest transcript: (5941 bp); other transcripts of 3.8 kb and 1.5 kb; alternate splices in exon 4

### Protein



**Description** 835 amino acids, predicted molecular weight of 91.3 kDa for the longest isoform, called BCL11AXL, with 6 Kruppel C2H2 zinc fingers, a prolin rich domain, and an acidic domain; 773 and 243 amino acids for the BCL11AL and the BCL11AS respectively

**Expression** expressed in the fetal brain; low level or undetectable expression in most adult tissues, apart from lymph nodes, thymus, and bone marrow.

**Function** contains DNA binding motifs (Zn fingers)

**Homology** Evi9 (mouse); human BCL11B (14q32.1)

### Implicated in

**Entity** [t\(2;14\)\(p13;q32\)](#) in B-cell malignancies

**Disease** [chronic lymphocytic leukemia](#) / immunocytoma aggressive disease; possibly also other t(2;14)(p13;q32) in other B-cell diseases (acute lymphocytic leukemia, myeloma, ...) involve the same genes, but probably not Hodgkin disease cases with 2p amplification

**Cytogenetics** most often the sole anomaly

**Hybrid/Mutated Gene** head to head translocation of BCL11A with [IGH](#) switch sequences on the der(2)

**Oncogenesis** BCL11A is overexpressed

### External links

Nomenclature	
<a href="#">Hugo</a>	<a href="#">BCL11A</a>
<a href="#">GDB</a>	<a href="#">BCL11A</a>
<a href="#">Entrez Gene</a>	<a href="#">BCL11A_53335</a> B-cell CLL/lymphoma 11A (zinc finger protein)
Cards	
<a href="#">Atlas</a>	<a href="#">BCL11AID391</a>
<a href="#">GeneCards</a>	<a href="#">BCL11A</a>
<a href="#">Ensembl</a>	<a href="#">BCL11A</a>
<a href="#">CancerGene</a>	<a href="#">BCL11A</a>
<a href="#">Genatlas</a>	<a href="#">BCL11A</a>
<a href="#">GeneLynx</a>	<a href="#">BCL11A</a>
<a href="#">eGenome</a>	<a href="#">BCL11A</a>
<a href="#">euGene</a>	<a href="#">53335</a>
Genomic and cartography	
<a href="#">GoldenPath</a>	<a href="#">BCL11A</a> - <a href="#">chr2:60589953-60692284</a> - <a href="#">2p16.1</a> (hq17-

May\_2004)

[Ensembl](#) [BCL11A - 2p16.1 \[CytoView\]](#)  
[NCBI](#) [Genes Cyto](#) [Gene Seq](#) [Map View - NCBI]  
[OMIM](#) [Disease map \[OMIM\]](#)  
[HomoloGene](#) [BCL11A](#)

### Gene and transcription

[Genbank](#) [AB058712](#) [SRS] [AB058712](#) [ENTREZ]  
[Genbank](#) [AF080216](#) [SRS] [AF080216](#) [ENTREZ]  
[Genbank](#) [AJ404611](#) [SRS] [AJ404611](#) [ENTREZ]  
[Genbank](#) [AJ404612](#) [SRS] [AJ404612](#) [ENTREZ]  
[Genbank](#) [AJ404613](#) [SRS] [AJ404613](#) [ENTREZ]  
[RefSeq](#) [NM\\_018014](#) [SRS] [NM\\_018014](#) [ENTREZ]  
[RefSeq](#) [NM\\_022893](#) [SRS] [NM\\_022893](#) [ENTREZ]  
[RefSeq](#) [NM\\_138553](#) [SRS] [NM\\_138553](#) [ENTREZ]  
[RefSeq](#) [NM\\_138559](#) [SRS] [NM\\_138559](#) [ENTREZ]  
[RefSeq](#) [NT\\_086611](#) [SRS] [NT\\_086611](#) [ENTREZ]  
[AceView](#) [BCL11A](#) AceView - NCBI  
[TRASER](#) [BCL11A](#) Traser - Stanford  
[Unigene](#) [Hs.370549](#) [SRS] [Hs.370549](#) [NCBI] [HS370549](#) [spliceNest]

### Protein : pattern, domain, 3D structure

[SwissProt](#) [Q9H165](#) [SRS] [Q9H165](#) [EXPASY] [Q9H165](#) [INTERPRO]  
[Prosite](#) [PS00028 ZINC FINGER C2H2 1](#) [SRS] [PS00028 ZINC FINGER C2H2 1](#) [Expasy]  
[Prosite](#) [PS50157 ZINC FINGER C2H2 2](#) [SRS] [PS50157 ZINC FINGER C2H2 2](#) [Expasy]  
[Interpro](#) [IPR007087 Znf\\_C2H2](#) [SRS] [IPR007087 Znf\\_C2H2](#) [EBI]  
[CluSTr](#) [Q9H165](#)  
[Pfam](#) [PF00096 zf-C2H2](#) [SRS] [PF00096 zf-C2H2](#) [Sanger] [pfam00096](#) [NCBI-CDD]  
[Smart](#) [SM00355 ZnF\\_C2H2](#) [EMBL]  
[Prodom](#) [PD000003 Znf\\_C2H2](#) [INRA-Toulouse]  
[Prodom](#) [Q9H165 BC1A\\_HUMAN](#) [Domain structure] [Q9H165 BC1A\\_HUMAN](#) [sequences sharing at least 1 domain]  
[Blocks](#) [Q9H165](#)

### Polymorphism : SNP, mutations, diseases

[OMIM](#) [606557](#) [map]  
[GENECLINICS](#) [606557](#)  
[SNP](#) [BCL11A](#) [dbSNP-NCBI]  
[SNP](#) [NM\\_018014](#) [SNP-NCI]

<a href="#">SNP</a>	<a href="#">NM_022893</a> [SNP-NCI]
<a href="#">SNP</a>	<a href="#">NM_138553</a> [SNP-NCI]
<a href="#">SNP</a>	<a href="#">NM_138559</a> [SNP-NCI]
<a href="#">SNP</a>	<a href="#">BCL11A</a> [GeneSNPs - Utah] <a href="#">BCL11A</a> [SNP - CSHL] <a href="#">BCL11A</a> [HGBASE - SRS]

### General knowledge

<a href="#">Family Browser</a>	<a href="#">BCL11A</a> [UCSC Family Browser]
<a href="#">SOURCE</a>	<a href="#">NM_018014</a>
<a href="#">SOURCE</a>	<a href="#">NM_022893</a>
<a href="#">SOURCE</a>	<a href="#">NM_138553</a>
<a href="#">SOURCE</a>	<a href="#">NM_138559</a>
<a href="#">SMD</a>	<a href="#">Hs.370549</a>
<a href="#">SAGE</a>	<a href="#">Hs.370549</a>
<a href="#">Amigo</a>	<a href="#">component cytoplasm</a>
<a href="#">Amigo</a>	<a href="#">process hemopoiesis</a>
<a href="#">Amigo</a>	<a href="#">function nucleic acid binding</a>
<a href="#">Amigo</a>	<a href="#">component nucleus</a>
<a href="#">Amigo</a>	<a href="#">process regulation of transcription, DNA-dependent</a>
<a href="#">Amigo</a>	<a href="#">function zinc ion binding</a>
<a href="#">PubGene</a>	<a href="#">BCL11A</a>

### Other databases

#### Probes

<a href="#">Probe</a>	<a href="#">Cancer Cytogenetics (Bari)</a>
<a href="#">Probe</a>	<a href="#">BCL11A Related clones (RZPD - Berlin)</a>

#### PubMed

<a href="#">PubMed</a>	<a href="#">10 Pubmed reference(s) in LocusLink</a>
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Blood 2002; 99: 1474-1477.

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### Contributor(s)

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                 2002

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URL : <http://www.infobiogen.fr/services/chromcancer/Genes/BCL11AID391.html>

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