

BCL11AXL

CONTACT INFORMATION:	LRF Haemato-oncology Group. University of Oxford
STATUS:	Validated
TYPE:	mouse anti human
CLONE NAME:	BCL11A/123
PROTEIN:	C-terminus of extra long isoform of BCL11A, BCL11AXL (aa 637-835)
PROTEIN WEB:	http://www.ncbi.nlm.nih.gov/omim/606557
ANTIGEN USED:	Bacterially expressed GST-fusion protein of human BCL11AXL
FUSION PARTNER:	NS1
ISOTYPE:	IgG1
SPECIES REACTIVITY:	Human
PREPARATION AND STORAGE:	Aliquot and store at 4oC. Do not freeze.
APP RECOMMENDED:	IHQ-paraffin, IHQ-frozen, WB
APP NO TESTED:	IF, IP, Flow cytometry

DESCRIPTION

BCL11A is a Krüppel zinc-finger transcription factor identified originally from a chromosome translocation in aggressive B-cell chronic lymphocytic leukaemia. The gene may function as both an oncogene and a tumour suppressor. Alternative splicing generates multiple isoforms, the BCL11AXL being the largest and most abundant transcript. The protein is differentially expressed during B-cell development and is strongly expressed in plasmacytoid dendritic cells. The BCL11A/123 antibody specifically recognises the extra long form of the protein and not the long or short forms of BCL11A. The BCL11A/123 antibody is not cross reactive with the long form of the BCL11B protein that shares significant sequence identity with the immunogen.

REFERENCES

Pulford K, Banham AH, Lyne L, et al. The BCL11AXL transcription factor: its distribution in normal and malignant tissues and use as a marker for plasmacytoid dendritic cells. *Leukemia*. 2006;20:1439-1441.

Weniger MA, Pulford K, Gesk S, et al. Gains of the proto-oncogene BCL11A and nuclear accumulation of BCL11A(XL) protein are frequent in primary mediastinal B-cell lymphoma. *Leukemia*. 2006;20:1880-1882.

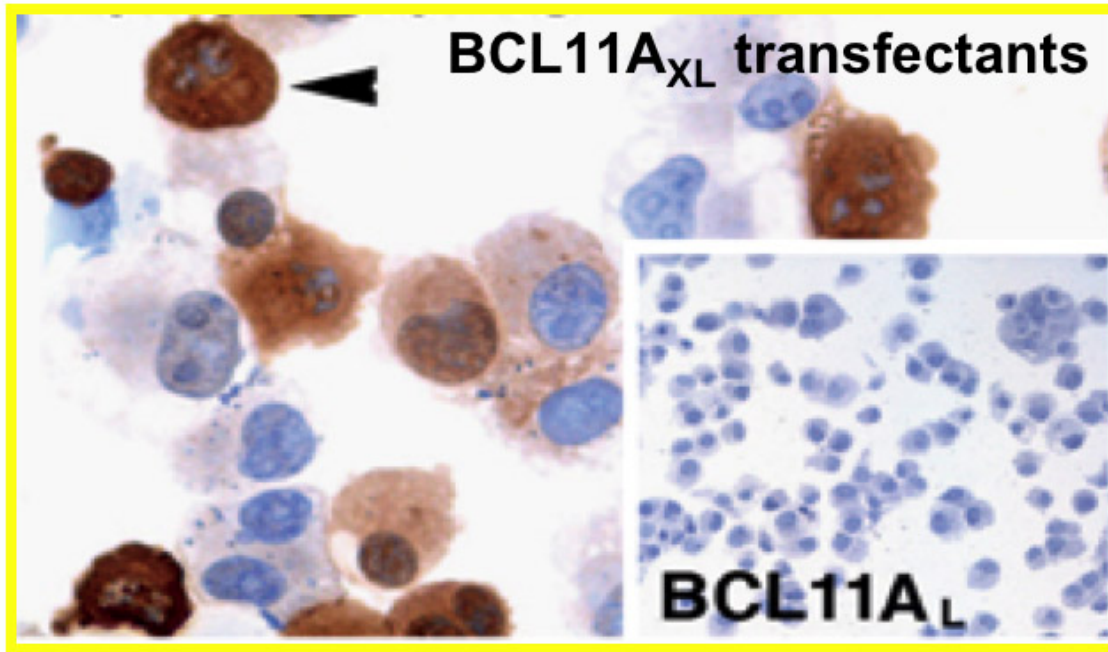
Liu H, Ippolito GC, Wall JK, et al. Functional studies of BCL11A: characterization of the conserved BCL11A-XL splice variant and its interaction with BCL6 in nuclear paraspeckles of germinal center B cells. *Mol Cancer*. 2006;5:18.

Marafioti T, Paterson JC, Ballabio E, et al. Novel markers of normal and neoplastic human plasmacytoid dendritic cells. *Blood*. 2008;111:3778-3792.

Chetaille B, Bertucci F, Finetti P, et al. Molecular profiling of classical Hodgkin lymphoma tissues uncovers variations in the tumor microenvironment and correlations with EBV infection and outcome. *Blood*. 2009;113:2765-3775

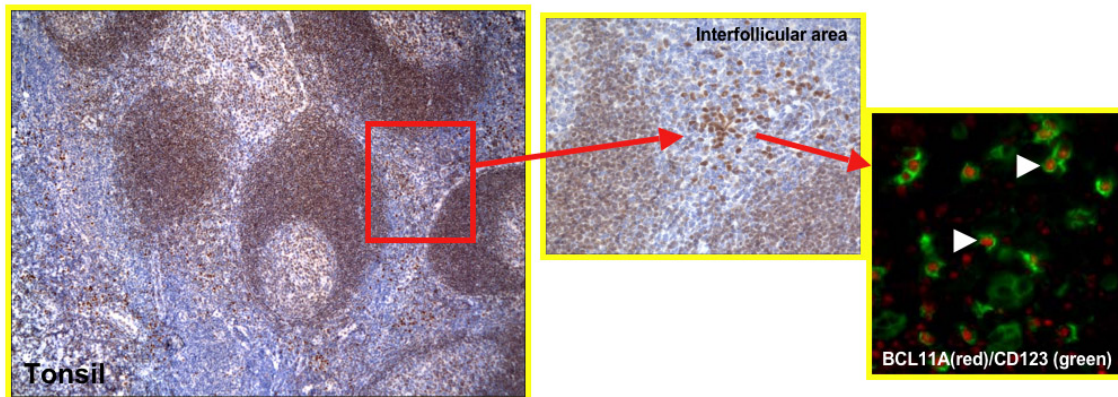
APPLICATIONS

IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytopspins									
Recommended	BCL11 A/123	neat	supernatant		Dako Envision	Tonsil	COS1	Nucleus	NT
Paraffin tissue									
Recommended	BCL11 A/123	1/10	supernatant	Tris/EDTA	Dako Envision	Tonsil	COS1	Nucleus	NT
Immunofluorescence									



Immunolabelling of BCL11AXL transfected COS1 cells

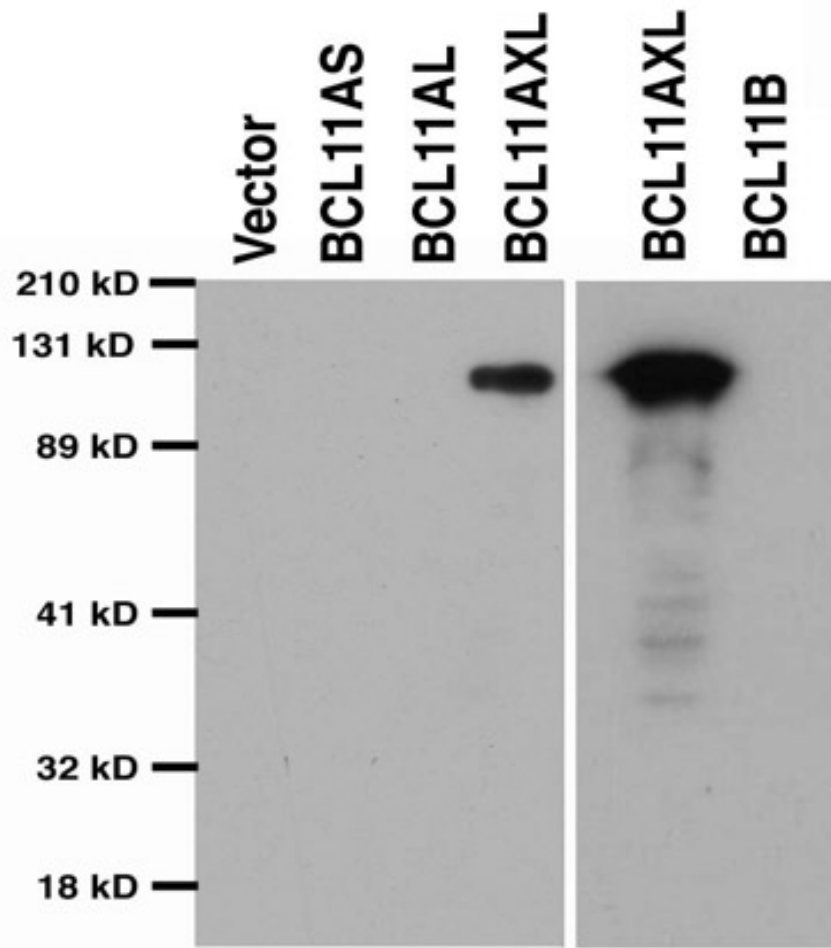
Nuclear staining of frozen COS/ BCL11AXL transfectants but not BCL11AL transfectants using antibody BCL11A/123.



Tonsil staining of BCL11AXL with BCL11A/123

BCL11AXL is present in tonsillar B cells (brown) in germinal centres and mantle zones. Double labelling studies show the strongly labelled cells in the interfollicular areas to be CD123-positive plasmacytoid dendritic cells (arrowhead).

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								
Recommended	BCL11A/123	neat	supernatant	tonsil	COS1	91kDa	approx 120kDa	NT
Immunoprecipitation								



**Western blot
with: BCL11A/123**

Western blotting of BCL11 transfectants

Western Blotting characterization of BCL11A/123 monoclonal antibody with lysates of transfectants expressing different BCL11A isoforms and the highly homologous BCL11B protein. Shows specificity of the BCL11A/123 antibody for the detection of BCL11AXL.