LMO2

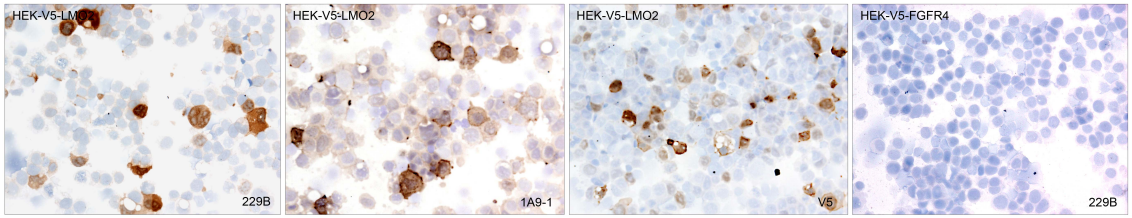
CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	mouse anti human
CLONE NAME:	229B
PROTEIN:	human full length LMO2
PROTEIN WEB:	http://www.ncbi.nlm.nih.gov/protein/214832074
ANTIGEN USED:	His-GST-LMO2 recombinant protein
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG1
SPECIES REACTIVITY:	Human
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze
APP RECOMMENDED:	IHQ-paraffin, IF, WB
APP NO RECOMMENDED:	IHQ-frozen
APP NO TESTED:	IP, Flow cytometry

DESCRIPTION

LMO2 encodes a cysteine-rich, two LIM-domain protein that is required for yolk sac erythropoiesis. The LMO2 protein has a central and crucial role in hematopoietic development and is highly conserved. The LMO2 transcription start site is located approximately 25 kb downstream from the 11p13 T-cell translocation cluster (11p13 ttc), where a number T-cell acute lymphoblastic leukemia-specific translocations occur. Alternative splicing results in multiple transcript variants encoding different isoforms. LMO2 protein is expressed as a nuclear marker in normal germinal-center (GC) B cells and GC-derived B-cell lines and in a subset of GC-derived B-cell lymphomas. LMO2 is expressed in erythroid and myeloid precursors and in megakaryocytes and also in lymphoblastic and acute myeloid leukemias. It is rarely expressed in mature T, natural killer (NK), and plasma cell neoplasms and is absent from nonhematolymphoid tissues except for endothelial cells.

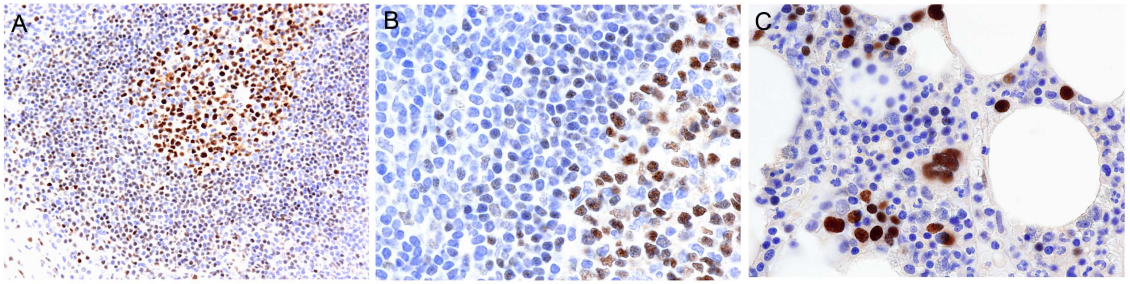
APPLICATIONS

IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytospins									
Recommended	229B	1:10	supernatant	none	goat anti mouse DAKO	Tonsil		nuclear	
Paraffin tissue									
Recommended	229B	1:20	supernatant	15 minutes ER2 (Tris-EDTA)	Novolink kit	Tonsil		nuclear	
Immunofluorescence									
Recommended	229B	1:100	supernatant	1 hour		Tonsil		nuclear	

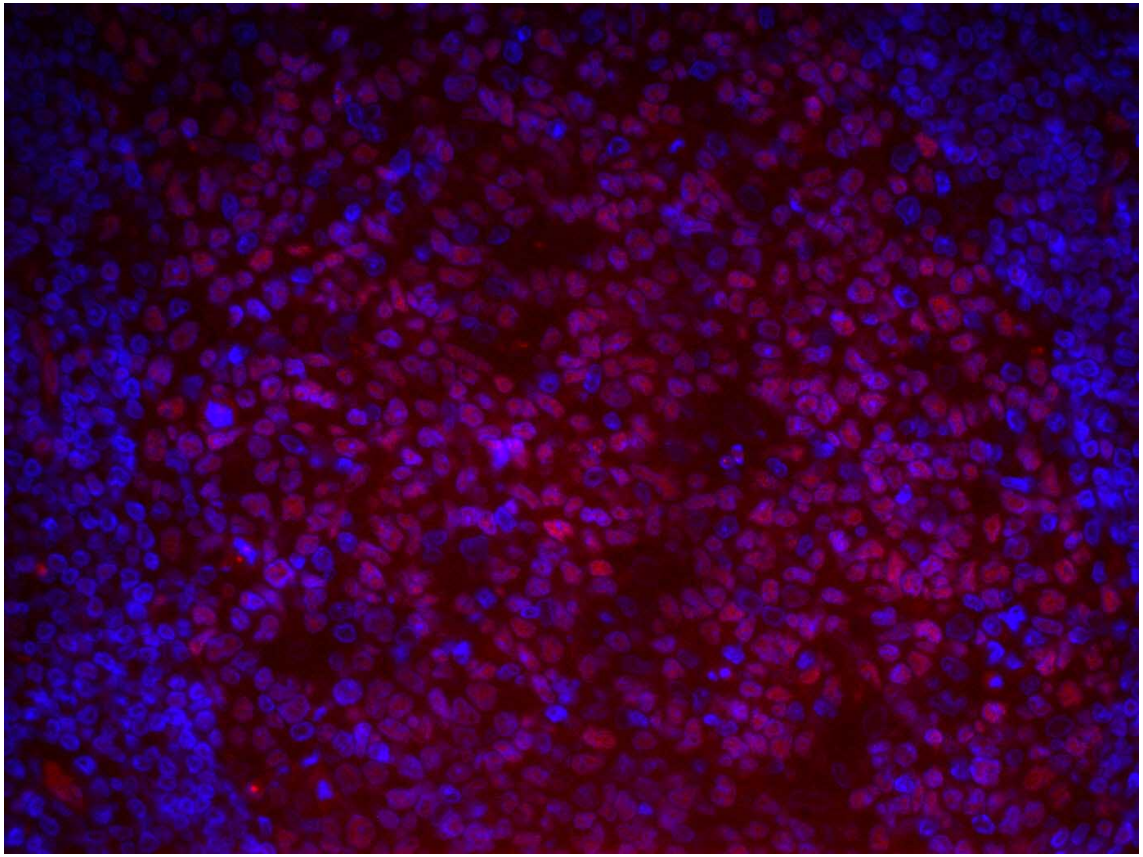


LMO2 antibody (229B) in transfected cells.

Validation of anti-LMO2 (229B) monoclonal antibody in HEK-V5-LMO2. Anti-LMO2 (1A9-1) and anti-V5 antibodies were used as positive controls. HEK-V5-FGFR4 transfected cells was used as negative control.



Anti-LMO2 (229B) immunohistochemistry on tonsil (A and B) and bone marrow (C) paraffin sections

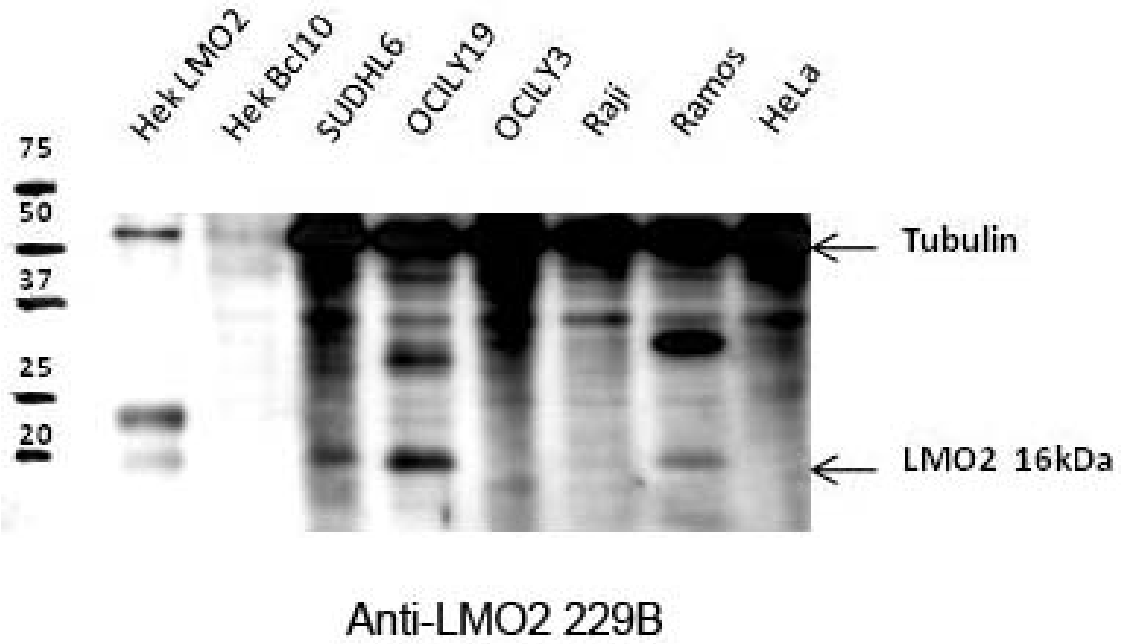


Expression of LMO2 protein by human lymphoid cells.

LMO2 is presented in Red. DAPI (blue).

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								

Not recommended	229B	1:10	supernatant			16kDa		
Immunoprecipitation								



Western blotting of anti-LMO2 using transfected cells and different lymphoma cell lines.

Western blotting of anti-LMO2 using transfected cells and different lymphoma cell lines. Description: Anti-LMO2 antibody (229B). Lane 1 Hek-LMO2 transfected cells (20ug) (+) Lane 2 Hek-Bcl10 transfected cells (20ug) (-) Lane 3 SUDHL6 cell line (100ug) (+) Lane 4 OCILY19 cell line (100ug) (+) Lane 5 OCILY3 cell line (100ug) (-) Lane 6 Raji cell line (100ug) (-) Lane 7 Ramos cell line (100ug) (+) Lane 8 Hela cell line (100ug) (-) Tubulin was used as loading control.