

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human LMO2 protein in Direct ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 1120357
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human LMO2 Met1-Ile158 Accession # P25791
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

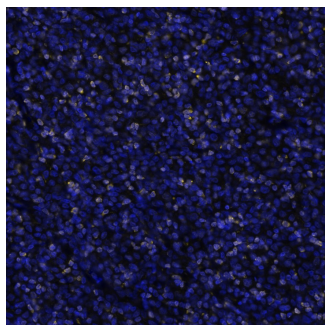
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1-0.5 µg/mL	K562 human chronic myelogenous leukemia cell line and Raji human Burkitt's lymphoma cell line
Immunohistochemistry	0.1-25 µg/mL	Immersion fixed paraffin-embedded sections of B-cell lymphoma
COMET	0.3 µg/mL	Immersion fixed paraffin-embedded sections of B-Cell Lymphoma

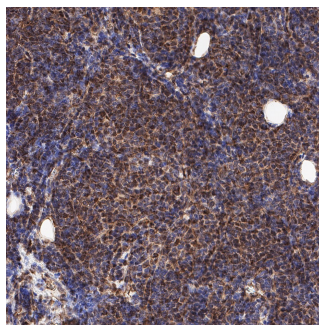
DATA

Multiplex Immunofluorescence



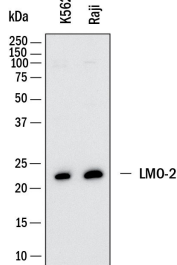
Detection of LMO2 in B-Cell Lymphoma via seqIF™ staining on COMET™ LMO2 was detected in immersion fixed paraffin-embedded sections of B-cell lymphoma using Mouse Anti-Human LMO2 Monoclonal Antibody (Catalog # MAB11790) at 0.3 µg/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; EpreDia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the nucleus. Protocol available in [COMET™ Panel Builder](#).

Immunohistochemistry



Immersion fixed paraffin-embedded sections of B-cell lymphoma LMO2 was detected in immersion fixed paraffin-embedded sections of B-cell lymphoma using Mouse Anti-Human LMO2 Monoclonal Antibody (Catalog # MAB11790) at 0.25 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei of the B-cell Lymphoma. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Western Blot



Detection of Human LMO2 by Western Blot. Western Blot shows lysates of K562 human chronic myelogenous leukemia cell line and Raji human Burkitt's lymphoma cell line. PVDF membrane was probed with 0.1 µg/ml of Mouse Anti-Human LMO2 Monoclonal Antibody (Catalog # MAB11790) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for LMO2 at approximately 22 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

LMO2, also known as Rhombotin-2 and T-cell translocation protein-2, is a transcriptional co-factor that is required for hematopoietic and endothelial development. It contains two LIM domains that are characterized by a zinc binding, cysteine rich motif consisting of two tandemly repeated zinc fingers. LMO2 does not interact directly with DNA but is involved in the assembly of multiprotein transcription factor complexes. Human and mouse LMO2 share 99% amino acid sequence homology.