

HLDA9 Antibody Validation File

Antibody Information

Antibody name: TPD153

Specificity: Human LSP1

Antibody species: Mouse

Ig Isotype: IgG1

Immunogen: Tonsil cell suspension

Epitope recognized: Not known

Specificity: Human only tested

Submitted: Karen Pulford (University of Oxford), Oxford, UK

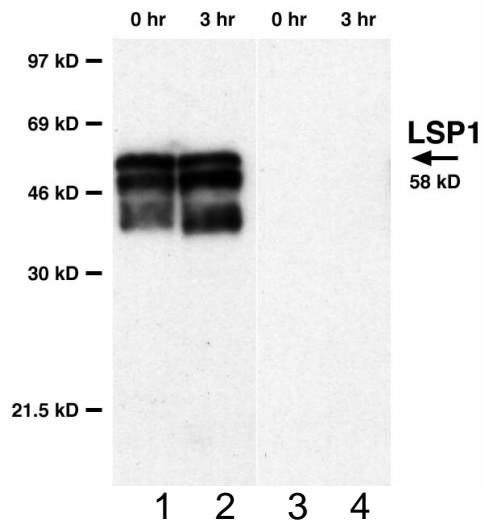
Antibody validation data

Biochemical validation of TPD153 monoclonal antibody in transfectants (Figure 1)

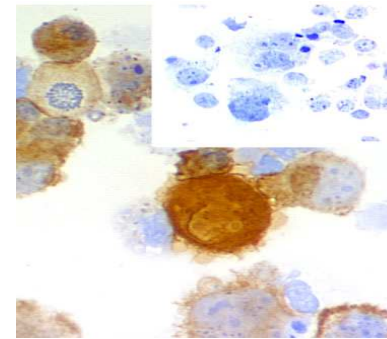
Biochemical characterization of TPD153 monoclonal antibody in a range of cell lines (Figure 2)

Expression in reactive human paraffin tonsil (Figure 3)

Figure 1: Biochemical validation of TPD153 monoclonal antibody in transfectants

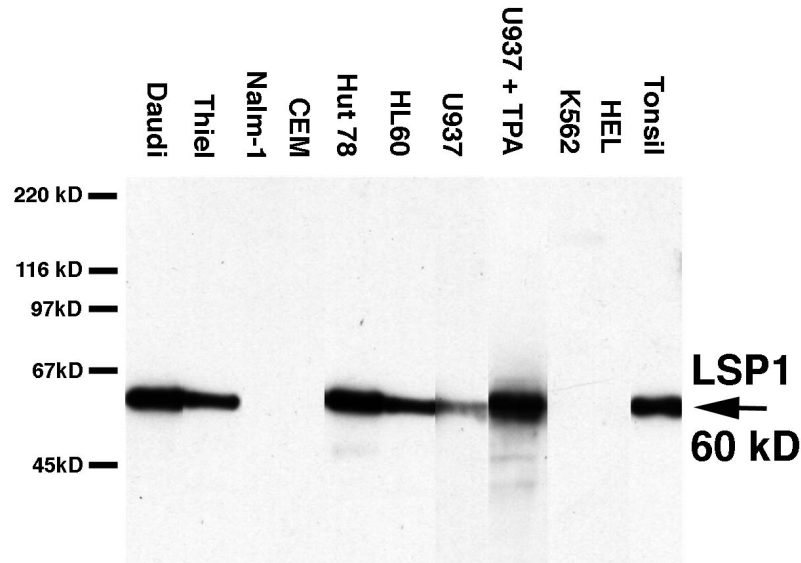


Antibody TPD153 recognised LSP1 (arrowed) in lysates from LSP1-positive COS transfectants (lanes 1 and 2) but not from vector only COS lysates (lanes 3 and 4).



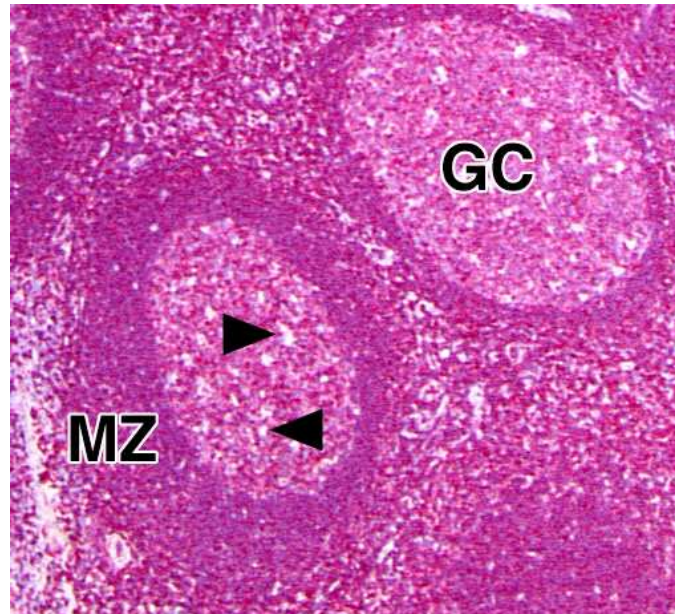
Antibody TPD153 stained LSP1 transfectants. Inset is vector only control

Figure 2. Biochemical characterization of TPD153 monoclonal antibody in lysates from a range of cell lines

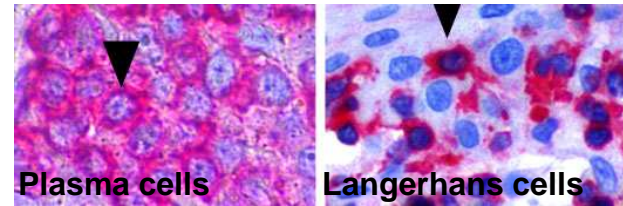


Western Blotting studies showing recognition of LSP1 in cell lines derived from a variety of haematological malignancies.

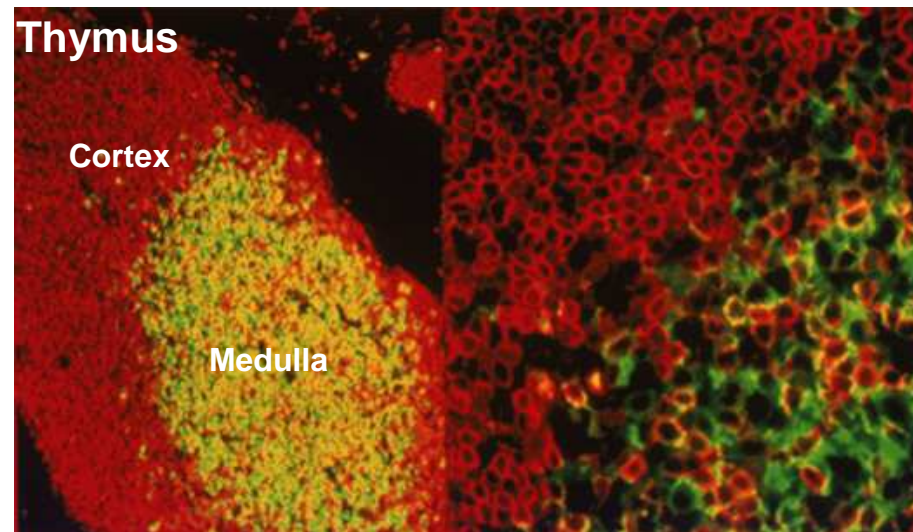
Figure 3: LSP1 (TPD153) expression in reactive tonsil and thymus



APAAP labelling of tonsil showing LSP1 is present in cells in the germinal centre (GC), mantle zones (MZ) and interfollicular areas. Tingible body macrophages (arrowed) are negative.



APAAP labelling showing presence of LSP1 in a) plasma cells and Langerhans cells (both arrowed) of tonsil.



Double immunofluorescent labelling of thymus for LSP1 (green) and CD3 (red) showing LSP1-positive CD3-positive cells (yellow) to be in the medulla. Only scattered LSP1-positive cells were seen in the cortex.

Publications using antibody to LSP1 (TPD153)

Pulford K, Jones M, Banham AH, Haralambieva E, Mason DY. Lymphocyte-specific protein 1: a specific marker of human leucocytes. *Immunology*. 1999;96:262-271.

Marafioti T, Jabri L, Pulford K, Brousset P, Mason DY, Delsol G. Leucocyte-specific protein (LSP1) in malignant lymphoma and Hodgkin's disease. *Br J Haematol*. 2003;120:671-678.

Marafioti T, Mancini C, Ascani S, et al. Leukocyte-specific phosphoprotein-1 and PU.1: two useful markers for distinguishing T-cell-rich B-cell lymphoma from lymphocyte-predominant Hodgkin's disease. *Haematologica*. 2004;89:957-964.

Patents : None

Antibody licensed to: DakoCytomation and Santa Cruz.