HLDA9 Antibody Validation File

Antibody Information

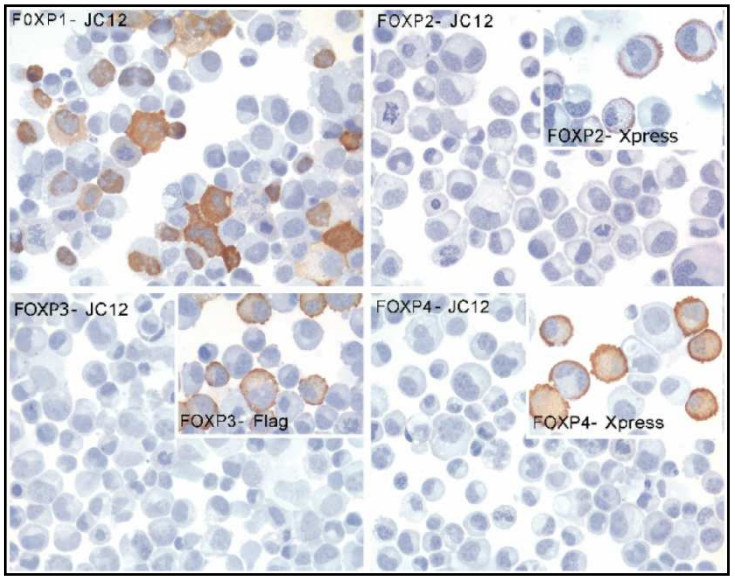
Antibody name: JC12
Specificity: Murine Foxp1
Antibody species: Mouse
Ig Isotype: IgG2a
Immunogen: Mouse autoantibody that does not recognise immunogen
Epitope recognized: 608-654 aa (human protein)
Specificity: Human and mouse

Submitted: Dr Alison Banham (University of Oxford, United Kingdom). Hybridoma created by Ms Jacqueline Cordell (University of Oxford, United Kingdom).

Antibody validation data

Figure 1: Validation of JC12 monoclonal antibody in transfected cells

Nuclear and cytoplasmic staining of FOXP1 transfected COS1 cells. No reactivity with FOXP family members (FOXP2, FOXP3, FOXP4).



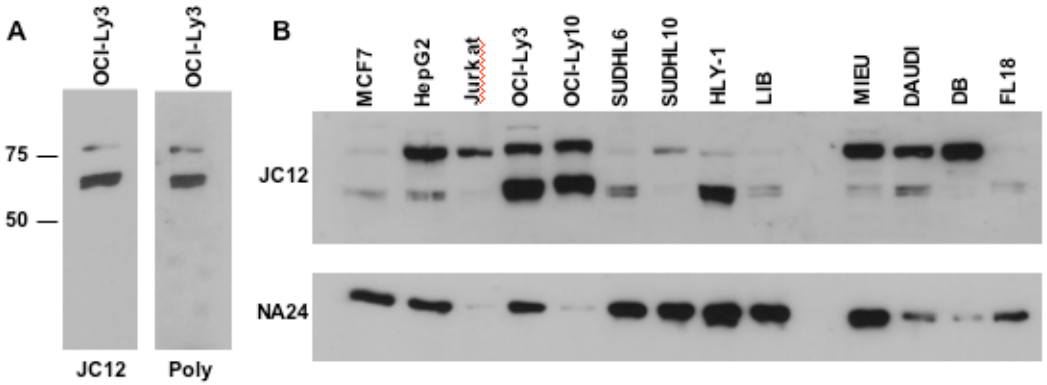
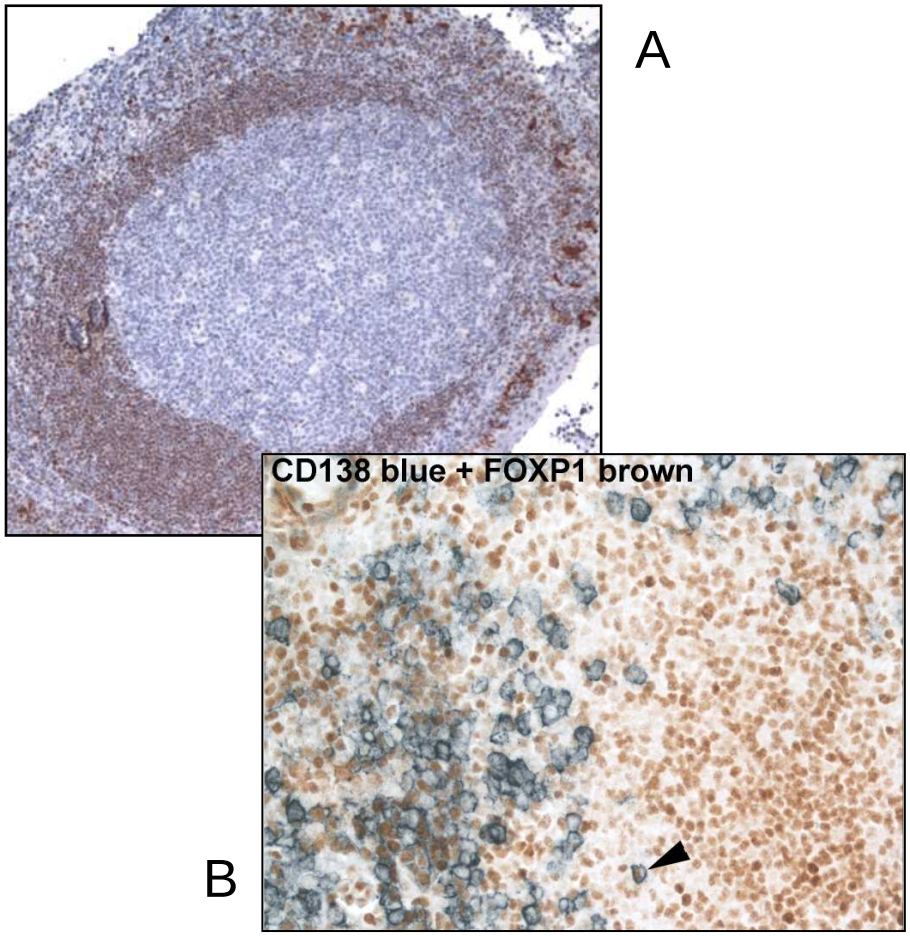
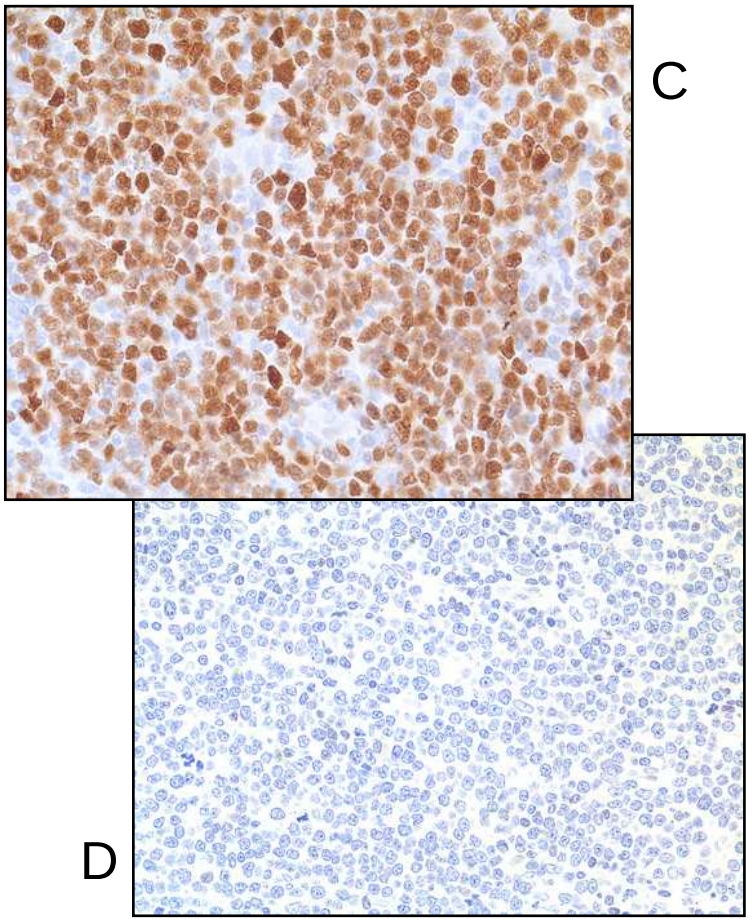


Figure 2: Western Blotting characterisation of JC12 monoclonal antibody

JC12 labels FOXP1 isoforms that are differentially expressed in nuclear extracts from lymphoma cell lines

Figure 3: FOXP1 (JC12) expression in reactive tonsil and diffuse large B-cell lymphoma (DLBCL)





Human tonsil: A) JC12 strongly labels mantle zone B cells and a variable proportion of germinal center and interfollicular cells. B) FOXP1 protein expression is rarely observed in plasma cells.

DLBCL: Nuclear FOXP1 protein is differentially expressed in diffuse large B-cell lymphomas

Key publications using antibody FOXP1 (JC12)

Banham AH, Beasley N, Campo E, Fernandez PL, Fidler C, Gatter K, Jones M, Mason DY, Prime JE, Trougouboff P, Wood K, Cordell JL.The FOXP1 winged helix transcription factor is a novel candidate tumor suppressor gene on chromosome 3p. Cancer Res. 2001 Dec 15;61(24):8820-9.

Hans CP, Weisenburger DD, Greiner TC, Gascoyne RD, Delabie J, Ott G, M殕ler-Hermelink HK, Campo E, Braziel RM, Jaffe ES, Pan Z, Farinha P, Smith LM, Falini B, Banham AH, Rosenwald A, Staudt LM, Connors JM, Armitage JO, Chan WC. Confirmation of the molecular classification of diffuse large B-cell lymphoma by immunohistochemistry using a tissue microarray. Blood. 2004 Jan 1;103(1):275-82.

Banham AH, Connors JM, Brown PJ, Cordell JL, Ott G, Sreenivasan G, Farinha P, Horsman DE, Gascoyne RD. Expression of the FOXP1 transcription factor is strongly associated with inferior survival in patients with diffuse large B-cell lymphoma. Clin Cancer Res. 2005 Feb 1;11(3):1065-72.

Nyman H, Jerkeman M, Karjalainen-Lindsberg ML, Banham AH, Leppa S. Prognostic impact of activated B-cell focused classification in diffuse large B-cell lymphoma patients treated with R-CHOP. Mod Pathol. 2009 Aug;22(8):1094-101

Choi WW, Weisenburger DD, Greiner TC, Piris MA, Banham AH, Delabie J, Braziel RM, Geng H, Iqbal J, Lenz G, Vose JM, Hans CP, Fu K, Smith LM, Li M, Liu Z, Gascoyne RD, Rosenwald A, Ott G, Rimsza LM, Campo E, Jaffe ES, Jaye DL, Staudt LM, Chan WC. A new immunostain algorithm classifies diffuse large B-cell lymphoma into molecular subtypes with high accuracy. Clin Cancer Res. 2009 Sep 1;15(17):5494-502.

Patents：YES (PCT/GB00/04590) but this has subsequently been allowed to lapse

Antibody licensed to:

Abcam PLC, AbD Serotech, eBioscience