# Dissecting CD47 expression in lymphoid neoplasms to inform precision immunotherapy with anti-CD47 phagocytic checkpoint blockade

# **Authors**

Andrea Marra,<sup>1,2</sup> Alan Ramsay,<sup>3</sup> Samuel Chamberlain-Keene,<sup>4</sup> Gabriela Soares,<sup>3</sup> Maurilio Ponzoni,<sup>5</sup> Sugerdana Padmasri,<sup>3,4</sup> Manuel Rodriguez-Justo,<sup>3</sup> Sabine Pomplun,<sup>3</sup> Ian Proctor,<sup>3</sup> Anna Childerhouse,<sup>3</sup> Alsharabati Muntasser,<sup>3,4</sup> Mario Cioce,<sup>1,2</sup> Vito Michele Fazio,<sup>1,2</sup> German Ott,<sup>6</sup> Miguel Piris,<sup>7</sup> Brunangelo Falini<sup>8</sup> and Teresa Marafioti<sup>3,4</sup> <sup>1</sup>Department of Medicine and Surgery, Laboratory of Molecular Medicine and Biotechnology, Università Campus Bio-Medico di Roma, Rome, Italy; <sup>2</sup>Institute of Translational Pharmacology, National Research Council of Italy (CNR), Rome, Italy; <sup>3</sup>Department of Cellular Pathology, University College London Hospitals NHS Foundation Trust,

London, UK; <sup>4</sup>Department of Pathology, University College London, London, UK; <sup>5</sup>Department of Histopathology, Università Vita-Salute San Raffaele, Milano, Italy; <sup>6</sup>Department of Clinical Pathology, Robert Bosch Hospital, Stuttgart, Germany; <sup>7</sup>Department of Pathology, IIS Hospital Universitario Fundación Jiménez Díaz, Madrid, Spain and <sup>8</sup>Department of Medicine and Surgery, University of Perugia, Italy

#### Correspondence:

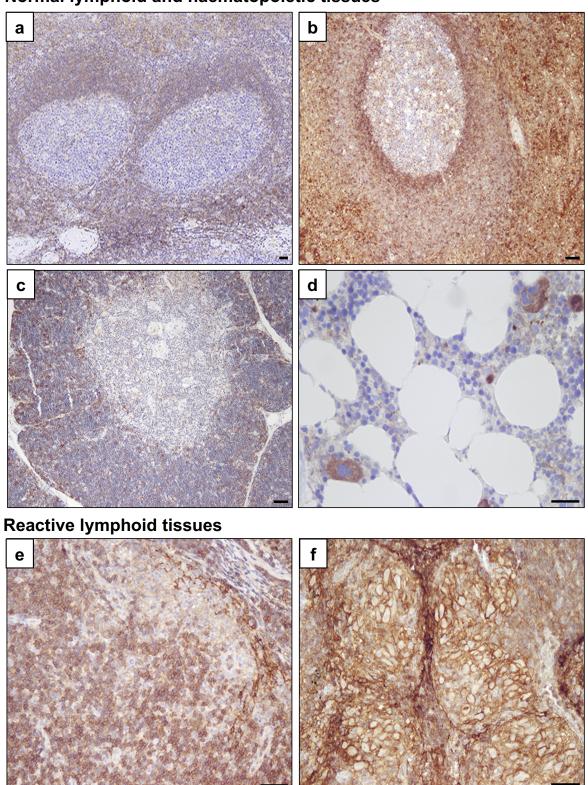
T. MARAFIOTI - t.marafioti@ucl.ac.uk

A. MARRA - andrea.marra@unicampus.it

https://doi.org/10.3324/haematol.2024.286864

### **SUPPLEMENTARY FIGURE 1**

# Normal lymphoid and haematopoietic tissues



# **SUPPLEMENTARY FIGURE 1.** Expression of the CD47 molecule in normal lymphoid and haematopoietic tissues.

**a**, in the tonsil, CD47 marks mantle zone B cells and B- and T-cells in the interfollicular area. Germinal center (GC) B-cells and plasma cells are negative; **b**, in the spleen, CD47 is expressed on mantle zone B cells, while is negative-to-weak on marginal zone B-cells. GC B-cells are negative, as well as plasma cells. In the splenic red pulp, both B- and T-cells show CD47 positivity; **c**, in the thymus, a subset of thymocytes are positive for CD47, while the medulla is negative; **d**, in the bone marrow, CD47 marks megakaryocytes with membranous/cytoplasmic positivity, while is variably expressed by myeloid cells. In reactive lymphadenitis (**e**, and **f**), monocytoid B-cells are negative, while histiocytes strongly express the CD47 marker. Scale bars, 50  $\mu$ m.

#### **SUPPLEMENTARY TABLE 1**

#### CD47 expression in normal haematopoietic and lymphoid tissues.

nai naematopoietic and lymphoid tissues.
variable, non specific staining
negative
positive
small lymphocytes are positive
Positive
Negative
Negative
B- and T-cells are positive
Epithelial crypt lining cells are positive
Positive
Negative
Negative-to-weak positive
Negative
B- and T-cells are positive
Sinus lining cells are negative
Sparse non specific uptake by parenchima histiocytes
Positive subpopulation of thymocytes
Negative
Negative