A new nomenclature for B cells

The majority of participants at the New York Academy of Sciences meeting on CD5 B cells proposed workshop designations for three populations/lineages of mature B cells. B-1 cells, which arise early in ontogeny in both mice and humans. encompass what have previously been known as Ly-1 (or CD5) B cells. The self-replenishing murine B-1 cells predominate in the peritoneal and pleural cavities, are a small fraction of the B cells in spleen, and are essentially absent from adult bone marrow and lymph node. Some investigators find it useful to subdivide the two independently selfreplenishing murine B-1 populations: B-1a cells express CD5 and constitute the majority of B-1 cells in normal animals: B-1b cells share phenotypic and functional characteristics with B-1a cells, but do not express detectable levels of CD5. B-1b cells have been referred to previously (and rather awkwardly) as the 'CD5- Ly-1 B-cell sister population'.

The participants agreed that it is essential to distinguish B-1 cells from the majority of mature B cells that are found in adult lymphoid organs and that arise later in ontogeny; however, the group was divided as to the best name. The participants proposed that these cells be called either conventional B cells or, perhaps, B-2 cells.

At one time the names B1 and B2 denoted cells that could be stimulated to secrete antibody in the absence or presence of T-cell help^{1,2}. Since these terms are no longer used, there should be little problem with the proposed nomenclature. Although a few participants felt that the new nomenclature, especially the distinction of B-1a and B-1b, was premature, the majority agreed to use the workshop designations in future publications. Some nonparticipants, who are included in the list below, have also agreed to the new nomenclature. We suggest that further discussion of these workshop designations be held at the International Congress of Immunology

and/or with the IUIS nomenclature committee.

Reported by Aaron Kantor

Signatories

Anthony Allison, Fred Alt, Larry Arnold, Susan Astrin, Gail Bishop, Paolo Casali, Stephen Clarke, Max Cooper, Antonio Coutinho, Wendy Davidson, Hua Gu, Richard Hardy, Geoffrey Haughton, Leonore Herzenberg, Leonard Herzenberg, Maureen Howard, Koichi Ikuta, Aaron Kantor, John Kearney, Paul Kincade. Norman Klinman, Thomas Kipps, Tadamitsu Kishimoto, John Kehrl, Georges Kohler, Marian Koshland, Frans Kroese. Gary Litman, Peter Lydyard, Miguel Marcos, Michael McGrath, Cesar Milstein, Paola Minoprio, Garry Nolan, Gustav Nossal, Anne O'Garra, Jane Parnes, Christine Plater-Zyberk, Klaus Rajewsky, Elizabeth Raveche, Michael Reth. Toshikazu Shirai, Nanette Solvason, Alan Stall, Kiyoshi Takatsu, Norman Talal, Phillip Tucker, Meenal Vakil, Thomas Waldschmidt, Jean-Claude Weill and Isaac Witz.

References

1 Gershon, R.K. (1974) Contemp.
Topics Immunobiol. 3, 1-25
2 Playfair, J.H.L. and Purves, E.C. (1971) Nature New Biol. 231, 149-151
3 Hardy, R.R. Curr. Biol. (in press)

© 1991. Elsevier Science Publishers Ltd. UK. 0167-4919/91/502.00