Brief Communication

Genetic Nomenclature for New Lymphocyte Antigens Controlled by the *I* Region of the *H-2* Complex

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Several laboratories have recently reported studies of new alloantigenic specificities preferentially expressed on lymphocytes and apparently controlled by genes in the Ir region [hereafter designated the I region (Klein et al. 1974)] of the H-2 gene complex (Hauptfeld et al. 1973, David et al. 1973, Sachs and Cone 1973, Götze et al. 1973, Hammerling et al. 1973). These antigens have been designated by various laboratories as Ir-1.1 (Hauptfeld et al. 1973), Lna (David et al. 1973b) and "β" (Sachs and Cone 1973). To avoid confusion in the literature and to establish a standard nomenclature for these new antigens, representatives of the laboratories concerned met during the H-2 workshop in Bar Harbor, Maine, October 8-10, 1973, and agreed upon the following notation: 1) The system of antigens and the controlling genetic element(s) will be provisionally designated Ia (I-region-associated antigens). This symbol was chosen as a general, descriptive term having no specific connotations with regard to possible relationships of these antigens with Ir-1 or Lad genes or the tissue or cellular distribution of these antigens. When further information on these questions becomes available, the notation can be modified as necessary. 2) If it is found that these antigens are controlled by more than one genetic locus in the I region, the separate loci will be designated by numbers, Ia-1, Ia-2, Ia-3, etc. 3) If it is found that there are multipe Ia loci, some of which control antigens specific for B lymphocytes (bursa-equivalent lymphocytes) and some of which control antigens specific for T lymphocytes (thymusderived lymphocytes), those loci may be distinguished by the symbols Iab and Iat respectively. Multiple loci of each type would be denoted Iab-1, Iab-2, etc. and Iat-1, Iat-2, etc. 4) Alleles at the Ia loci should be designated by a superscript which

corresponds to the *H-2* haplotype of origin of that allele, for example Ia^b or $Ia-1^b$ or Iab^b , etc., if the allele is a part of, or derived by recombination from the *H-2b* haplotype. 5) Distinct alloantigenic specificities of the Ia system will be given sequential numerical designations, Ia.1, Ia.2, Ia.3, etc. In referring to these specificities, care should be taken to use the complete specificity designation, Ia.1, etc., whenever there is any possibility of confusion with specificities of the H-2 system, H-2.1, etc.

References

- David, C. S., Shreffler, D. C., and Frelinger, J. A.: New lymphocyte antigen system (Lna) controlled by the *Ir* region of the mouse *H-2* complex. *Proc. Nat. Acad. Sci.* USA 70:2509-2514, 1973.
- Götze, D., Reisfeld, R. A., and Klein, J.: Serologic evidence for antigens controlled by the *Ir*-region in mice. *J. Exp. Med. 138*:1003-1008, 1973.
- Hämmerling, G. J., Deak, B. D., Mauve, G., Hämmerling, U., and McDevitt, H. O.: B lymphocyte alloantigens controlled by the *I* region of the major histocompatibility complex in mice. *Immunogenetics* 1:68-81, 1974.
- Hauptfeld, V., Klein, D., and Klein, J.: Serological identification of an *Ir*-region product. *Science* 181:167-169, 1973.
- Klein, J., Bach, F. H., Festenstein, F., McDevitt, H., Shreffler, D., Snell, G., and Stimpfling, J.: Genetic nomenclature for the *H-2* complex of the mouse. *Immunogenetics* 1:184-188, 1974.
- Sachs, D. H. and Cone, J. L.: A mouse B cell alloantigen determined by gene(s) linked to the major histocompatibility complex. J. Exp. Med. 138:1289-1304, 1973.