1.0 (as in the case of XX; tra/tra males) irrespective of sexual phenotype, the template activity of the X chromosome is set at a female level. Similarly, in the case of XX; dxx/dxx individuals, the X chromosome is transcribed at female level. On the other hand, in XY; dxx/dxx individuals, the level of template activity is set at a male level. In summary, our data clearly indicate that the sex determining mutants, tra, ix and dxx have no role in regulating the template organization of the X chromosome(s) (see Table 1) for dosage compensation.

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Alatortsev, V.E. Institute of Molecular Genetics, Russian Academy of Sciences, Kurchatov Sq.46, Moscow, 123182, Russia. Genetic loci in the Pgd-K10 region of the Drosophila X chromosome.

The Pgd-K10 region of the X chromosome is one of the most genetically investigated areas of the Drosophila melanogaster genome. The fine genetic structure of this region has been determined in several independent studies based on saturation of this region by lethal mutations and by rearrangements and complementation analysis (Gvozdev et al., 1973; Perrimon, et al., 1984; Alatortsev and Tolchkov, 1985). For the descriptions of the individual complementation groups, see Lindsley and Zimm (1992).

There are some additions to the information about earlier described complementation groups. First, our complementation analysis showed that group N2 (Gvozdev et al., 1977) coincides with group l(1)C204 (Perrimon et al., 1985), as well as groups N7 and l(1)JA127. Thus, two pairs of groups were correctly jointed (Lindsley and Zimm, 1992). They were designated as wap1 and l(1)2Ea, respectively. Second, the l(1)90 mutation representing separate complementation group complements the JCI05 deletion and must be situated to the left of wap1, between the Pgd and wap1 loci.

Contiguous and overlapped DNA fragments from the Pgd-K10 region were cloned in several laboratories in the course of chromosomal walks along the Canton (Haenlin et al., 1985), Oregon (Dura et al., 1987), and gt WQ (Alatortsev, 1987) X chromosomes, and the physical map for the region was constructed. Molecular approaches allowed to expand our knowledge about genetic structure of the region. Thus, cluster containing four Cytochrome P450 genes was found in the interval between wap1 and pn loci (Gandhi et al., 1992; Frolov and Alatortsev, 1994). Recently the Vinculin (Vinc) gene was described between the 2Ea and pcox loci (Alatortsev et al., 1997).

Current arrangement of genetic loci in the Pgd-K10 interval is shown in Figure 1.

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Figure 1. Arrangement of genetic loci in the Pgd-K10 region of the Drosophila X chromosome. The orientation is from centromere-distal (left) to centromere-proximal (right). Added or changed loci are marked by asterisks (see text).