c-Myb is a proto-oncogene associated with leukemias and lymphomas in birds and mammals, including humans.

- Variants have three representative forms: A-Myb, B-Myb, and c-Myb, but Drosophila melanogaster only possess one form, Dm-Myb.
- Dm-Myb mutants die before reaching adulthood (Manak, Mitiku, Lipsick, 2002).
- Myb has also been shown to be required for the proper activation of G2/M cell cycle genes (Georlette et al., 2007).

Chromatin, made up of DNA and associated proteins, can be euchromatic or heterochromatic.

- Euchromatin is mainly associated with active transcription, whereas heterochromatin is associated with repressed transcription.
- Active euchromatin and repressive heterochromatin are established by post-translational marks such as methyl groups and modifications to histones.

Because of Myb's role in gene silencing, we suspect a genetic interaction between Myb and Pc.

Our results demonstrate a strong genetic interaction between the Myb mutation and Pc, although we did not see an interaction between Myb and Pc. This may be due to the fact that Pc encodes a more severe antimorphic protein that makes the animal more susceptible to relevant genetic interactions. Identification of a genetic interaction between Myb and Pc is consistent with Myb's role in activating transcription for hundreds of target genes. In the absence of Myb, such genes are upregulated and may contribute to the progression of cancer.