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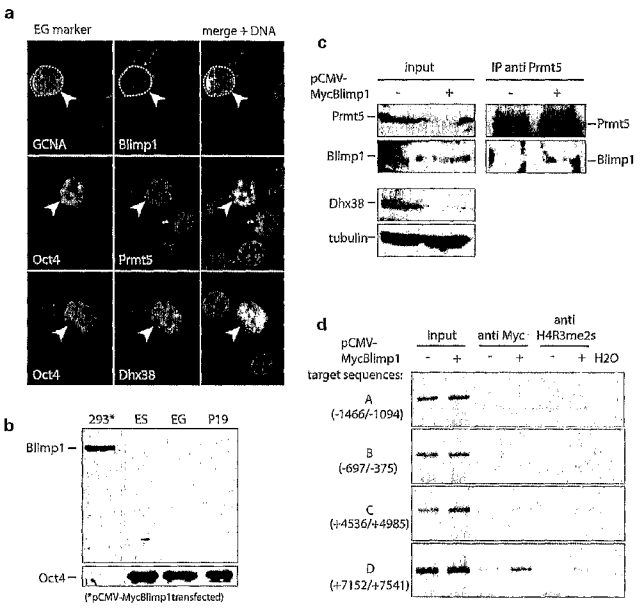
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(54) Title: EPIGENETIC REGULATORY COMPLEX FOR CONTROL OF GENE EXPRESSION



(57) Abstract: An epigenetic regulatory polypeptide complex comprises at least a first domain having site-specific DNA binding activity and at least a second domain having an arginine methyltransferase activity, wherein the second domain is capable of methylating an arginine residue located in the tail region of a histone H2A. The complex is able to regulate gene expression in cells, particularly in mammalian stem cells by controlling the methylation of R3 in the tail regions of histones H2A and H4. The complex is exemplified by a polypeptide complex comprising the DNA binding activity of Blimpi and the arginine methyltransferase activity of Prmt5.

WO 2007/129091 A1

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