

Role of MEIS1 in neurogenesis

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The MEIS1 locus is consistently the most strongly associated with restless legs syndrome (RLS). MEIS1 is a pleiotropic transcription factor with a significant role in cardiogenesis, hematopoiesis, limb development, and neurogenesis, among others. In particular, intronic MEIS1 variants highly associated with RLS are linked to development of the forebrain, which includes critical sensorimotor structures such as striatum. We present studies of the specific role of MEIS proteins in forebrain neurogenesis. This includes MEIS expression patterns during neurogenesis, neurogenic cell types expressing MEIS, and consequences of MEIS disruption on gene expression.