

Identification of a novel genetic locus underlying tremor and dystonia.

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Movement Disorders

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### ***In situ* Hybridization**

In situ hybridization images were downloaded from the Allen Institute for Brain Science at [www.alleninstitute.org](http://www.alleninstitute.org) (Lein et al. 2007). Detailed methods used for preparation of slides, probe design, hybridization, staining, analysis and annotation are fully documented at <http://help.brain-map.org/download/attachments/2818169/ABADDataProductionProcesses.pdf?version=1&modificationDate=1319477154403>

### **Expression of CAMTA2 in human brain**

Immunohistochemical (IHC) staining of P56 mouse brain sagittal sections revealed expression of CAMTA2 in the granule cell layers of the dentate gyrus and the pyramidal layer, and less strongly in the piriform area pyramidal layer (Figure Panel A). CAMTA2 was also expressed in the cerebral cortex, specifically the granular layer of lobules IV-V, the simple lobule, crus 1, crus 2, paramedian lobule and copula pyramidus. Significant expression was also noted in the dorsal cochlear nucleus and principal sensory nucleus of the trigeminal nerve. Relative expression of CAMTA2 is indicated by the heatmap (Figure Panel B). Intense staining of Purkinje cells in the cerebellum was also evident (Figure Panel C). Expression patterns in mouse brain for specific isoforms of CAMTA2 were not available.

