2005-07-07983B Supp Figure 8

a.

NFAT binding sites in the NFATc4 Promoter

```
human    ACTCGGTGCCACTCT-GCCCCCAGGACCCTCCTGGCCTCAGGCTTGGAGGGAAAGGGGAG
chimp    ACTCGGTGCCACTCT-GCCCCCAGGACCCTCCTGGTCTCAGGCTTGGAGGGAAAGGGGAG
rat      GCTCAGAGCCTCTCTCAATCCCAGAACTCTCTTCAACTCAAGATTTGGATTGAAAGTGCA
mouse    GCTCAGAGCCTCTCTCAATCCCAGATCTCTCTTCAACTCAAGATTTGGATGGAAAGGACA
          *** * *** ****    *****  * *** *   **** * ** *     ** *

human    GAGAAGTGGTTCTGCCTTGCTAGGTGCTATCTACACAG-TCTTCAGAATTTAAAAAAGGG
chimp    GAGAAGTGGTTCTGCCTTGCTAGGTGCTATCTACACAG-TCTTCAGAATTTAAAAAAGGG
rat      GTGAGGTG-ACCTTTCTTGGGA-ATTTTGGCTATACTACCTCTCAGAATGTATCGT-GGG
mouse    GTGAGGTG-CCCTTTCTTGGGAGATTTTGGCTATCCTGCTCTTCAGAATGTACCGT-GGG
         * ** ***   **  ****  *  *  *  ***  *      ******* **     ***

human    TCTTCCGTGGGCTCTCTACCCTGGGGGCCCAGGATGTGGCCCCTTTAAGGCTCTCGGACC
chimp    TCTTCCGTGGGCTCTCTACCCTGGGGGCCCAGGATGTGGCCCCTTTAAGGCTCTCGGACC
rat      CCTGCTACAA----TGGGATGCGG--GACAAAAATATGGCCTCTTTAAGGCGATCGGACC
mouse    CCTGCTACAA----TGGGGGACGGGTGACAAAAATATGGCCTCTTTAAGGCGAGGGGACC
          ** *         *       **  * * *  ** ***** *********    *****

human    CAGAA----------CCTTGAACTGAGACTAGGGGAGGTGGGGGCTGGGCTCTCTGCGGG
chimp    CAGAA----------CCTTGAACTGAGACTAGGGGAGGTGGGGGCTGGGCTCCCTGCGGG
rat      CGGACACCCCCCGCCCCTTACGCTGGGACTAAATAGGCTGAGGTTTGGGCCCTGGGTGGG
mouse    CGGAC-CTCCCCACCCCCTACGCTGGGACTAAATAGGCTGAGGTTTGGGCTTTCGGTGGG
         * **           ** *   *** *****     * ** **  *****     * ***

human    AAATGATTGTCACAACGGCGGACCAATAGGCAACATTAG-----TATCACTCTTGAAGG-
chimp    AAATGAT-GCCAC---------------------------------------------
rat      AAATGATTATCACAACTGTGGGCCAATAGGTACCATTAAGGTTCTATAACGTTTGAAGGG
mouse    AAATGATTGTCACAACTGTGGGCCAATAGGTACCATTAGGGTTCTATAACGTTTGAAGGG
         *******   ***

human    ACCGTTTTCCAATTCAGTTTTTTTTT----TTTTGAGGGGGAGGGACTGAAGAGAGGACA
chimp    --CGTTTTCCAATTCAGTTTTTTTTT----TTT-GAGGGGGAGGGCCTGAAGAGACCCCA
rat      ACCGTTTTCCAATTCAGGTTTTTCTCCCCCTTTGGAGGAGGTGGGACTGGAGAGATGACT
mouse    ACCATTTTCCAATTCAGTTTTTTCTCCCTCTTTGGAGGGGGTGGGACTGGAGAGATGACC
           * ************* ***** *     *** **** ** *** *** *****   *

human    GAGGGAGGGAGGGTGGGGGAGGACGAGGGGCGCGTGGTTTTCCCATCTCATCCCTGGAGG
chimp    GAGGGAGGGAGGGTGGGGGAGGACGAGGGGCGCGTGGTTTTCCCATCTCATCCCTGGAGG
rat      GAGGGAGGGAGAGTGGGGGAGGACTAGGGGCGCGTGGTTTTCCCATCTCATCCCTGGAGG
mouse    GGGGGCGGGGG---GGGGGGGAACTAGGGGCGCGTGGTTTTCCCATCTCATCCATGGAGG
         * *** *** *   ***** * ** ***************************** ******

human    AGGGGCTGGAGCATCCCCGGCAGCCAATCAGGGACAGGCTGGGGGGGGGACCGCTTTGAA
chimp    AGGGGCTGGAGCATCCCCGGCAGCCAATCAGGGACAGGCTGGGGGGGGGACCGCTTTGAA
rat      AGGGGCCGGTGCATCCCGGTTAGCCAATCAGGGACAGGCTGGGGGG--G-CCGCTTTGAA
mouse    AGGGGCCGGTGCATCCCGGGTAACCAATCAGAGACAGGCTGGGGGGGGG-CCGCTTTGAA
         ****** ** ******* *  * ******** **************  * **********

human    GAAGTTTGGGGGAAAAAAGTTTGGAAAAGTTTCTATAATAACGAGGGGGCTTCTGGAGGG
chimp    GAAGTTTGGGGGAAAAAAGTTTGGAAAAGTTTCTATAATAACGAGGGGGCTTCTGGAGGG
rat      GAAGTTTGGGAGAAAAAAGTTTGGAAAAGTTTCTATAATAACGAGGGGGCGTCCGGAGGG
mouse    GAAGTTTGGGAGAAAAAAGTTTGGAAAAGTTTCTATAATAACGAGGGGGCGTCCGGAGGG
         ********** ************************************** ** ******
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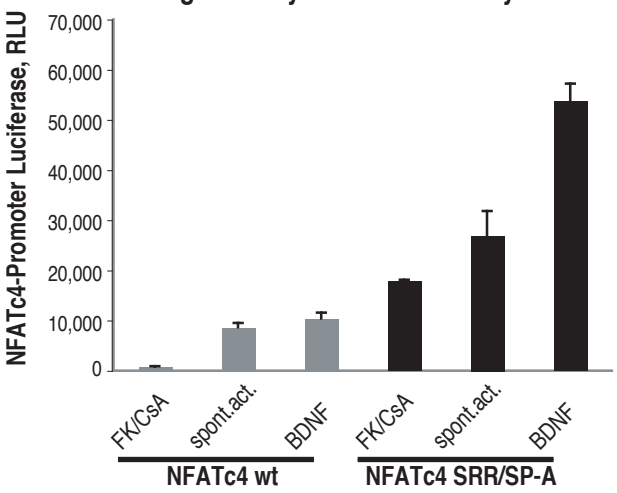
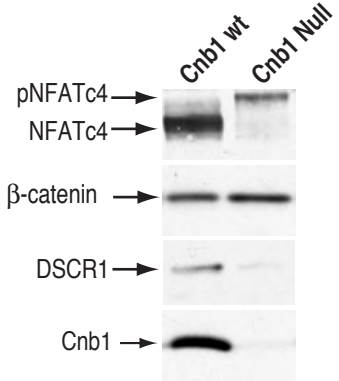
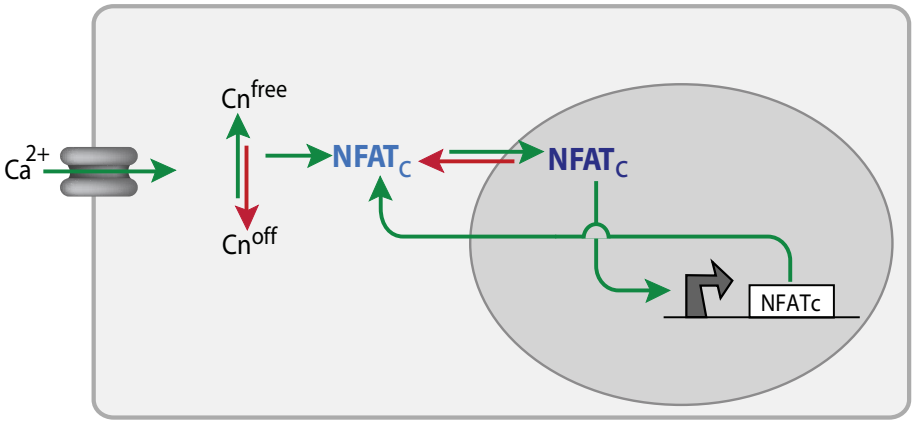
b.



c. NFATc4 and DSCR1 Expression are Regulated by CnN/NFAT Activity in E11.5 cortex



d. Positive Feedback Regulation of NFATc1 and c4