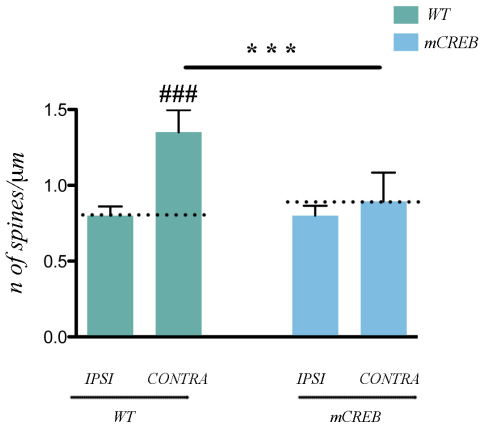
Supplementary figure 1



Supplementary figure 1

Histograms showing dendritic spine density along apical dendrites of layer V pyramidal neurons in wild type (WT) and mCREB mice.

Trimming condition results in enhanced number of spines in wild type but not mCREB mice (interaction genotype x condition: $F_{2, 60}$=5.7532, p<0.01). Wild type mice: significant increase of dendritic spine number along apical dendrites of pyramidal neurons in the *Contra* barrel cortex as compared to *Ipsi* and *Naïve* (post-hoc comparisons: *Contra* vs *Naïve* p<0.001; *Contra* vs *Ipsi* p<0.001). In *Ipsi* barrel cortex the number of spines was not affected by trimming condition (*Ipsi* vs *Naïve* p>0.05). mCREB mice: number of spines was unvaried upon trimming in both *Contra* and *Ipsi* as compared to *Naïve* barrel cortex (p > 0.05 for all comparisons). Values are expressed as number of spines (mean±s.e.m) per 1 μm segment. Dotted line indicates average spine density in relative naïve groups. ###< 0.001 (difference from relative naïve); ***<0.001 (difference between genotypes).

No differences between number of dendritic spines along apical dendrites versus basal dendrites were reported (genotype x condition x dendritic category: $F_{2,128}$=0.30, p>0.05; Post hocs: p>0.05 for all *Naïve, Contra* and *Ipsi* apical dendrites vs basal dendrites comparisons in both genotypes).