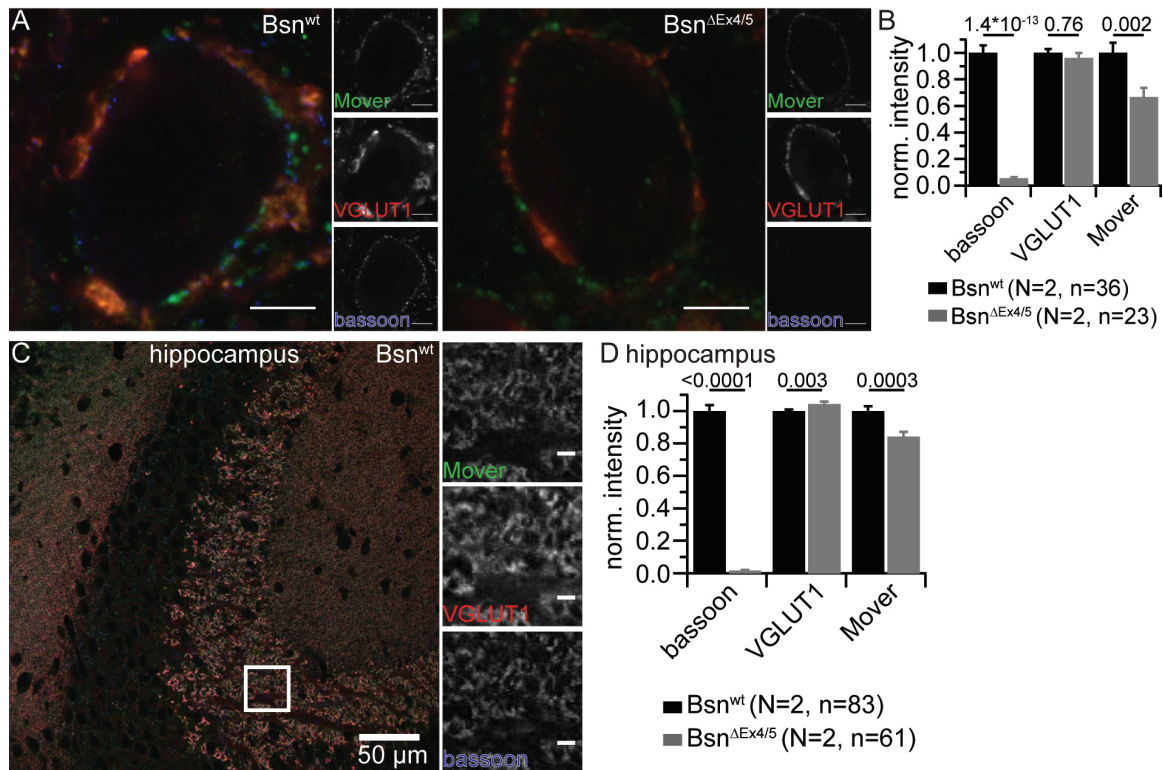


Figure S1: Mover expression is reduced in $Bsn^{\Delta Ex4/5}$ endbulbs and synapses in the hippocampus



A) Confocal images of endbulb synapses in the AVCN labeled for Mover (green), bassoon (blue) and VGLUT1 (red). **B)** While the fluorescence intensity of Mover, taken from VGLUT1 positive terminals, representing endbulbs of Held, was significantly reduced for $Bsn^{\Delta Ex4/5}$ animals, the VGLUT1 intensity remained unchanged. **C,D)** Since Mover is highly expressed in synapses of the hippocampus (Kremer et al., 2007), the same experiment was performed in slices of the hippocampus as control. Analysis was performed in ROIs of 100 x 100 pixels in the CA3 region of the hippocampus as exemplified in **(C)** where Mover fluorescence intensities of $Bsn^{\Delta Ex4/5}$ animals from VGLUT1 positive terminals showed a comparable reduction **(D)** as observed in the AVCN. All scale bars: 5 μm (if not stated otherwise in the image).

References:

Kremer, T., Kempf, C., Wittenmayer, N., Nawrotzki, R., Kuner, T., Kirsch, J., and Dresbach, T. (2007). Mover is a novel vertebrate-specific presynaptic protein with differential distribution at subsets of CNS synapses. *FEBS Lett.* 581, 4727–4733.