



Figure S3. Human vezatin expressed in fly motor neurons is not enriched in terminal boutons and does not rescue the decreased NMJ size caused by *vez*/ loss.

(A) A wild-type third-instar larval NMJ at which human vezatin (hVez) tagged with Venus is expressed in the motor neuron and detected with anti-GFP (green). Anti-HRP is in blue. Unlike *Vezi*:Venus, hVez:Venus is not enriched in the terminal bouton (top). Like *Vezi*:Venus, hVez:Venus was difficult to detect. Unlike *Vezi*:Venus, hVez:Venus was best imaged in fixed samples stained with anti-GFP antibodies (the signal in muscle is non-specific background). Scale bar is 10 μ m.

(B) Quantification of NMJ bouton numbers. Expression of hVez:Venus in motor neurons does not restore NMJ size in *vezl^{13.1}/Df(3R)Exel6180* mutants or alter NMJ size in wild type. n = animals, indicated on each bar. Error bars indicate SEM. ***p<0.001, ns = not significant, based on two-tailed t-tests. Means, SEMs, and p values are available in Table S1.