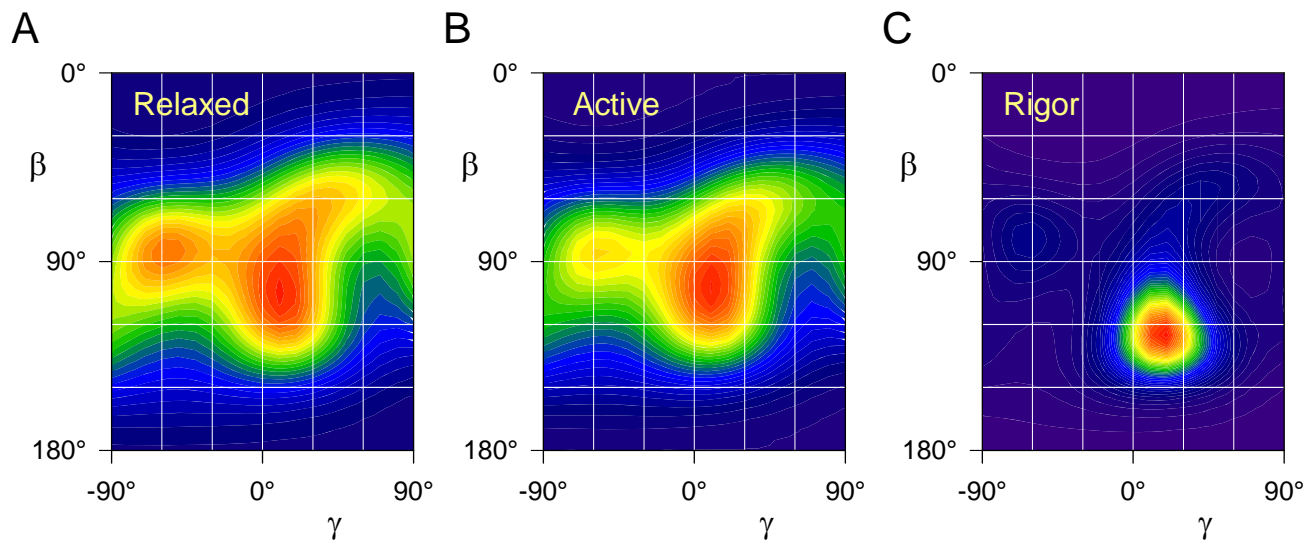
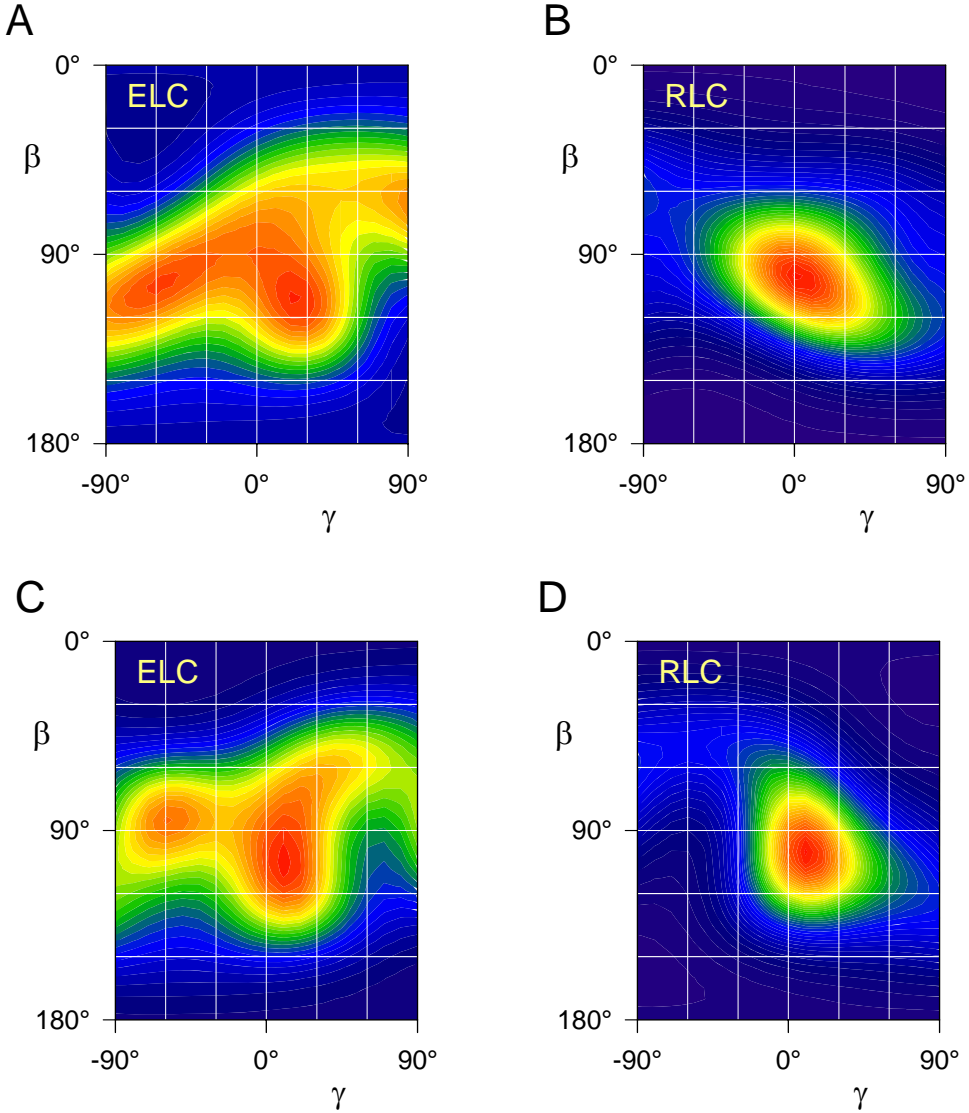


Supplementary Figure 1



SUPPLEMENTARY FIGURE 1. Contour plots of the ME orientation distributions (β , γ) of the LCD in relaxation (A), active contraction (B) and rigor (C), calculated from the $\langle P_2 \rangle$ and $\langle P_4 \rangle$ data in Fig. 3 using the crystal structure of nucleotide-free scallop myosin.

Supplementary Figure 2



SUPPLEMENTARY FIGURE 2. ME orientation distributions of the LCD in relaxed muscle determined from probes on the ELC (A,C) and RLC (B,D) using post-rigor structures of chicken skeletal myosin (A,B) and scallop myosin (C,D).