x-y-z-t calcium imaging A x-y imaging area **B** acquire repeating does not vary m9 z-stacks over time **m1** tissue depth (z axis) calcium sensor in muscles time (min) (MHC-CD8-GCaMP6f-Sh) **D** time series to c z-stacks to single ∆F x-y image x-y time series max intensity ave intensity t = n+1 max-ave = ΔF MHC-CD8-GCaMP6f-Sh NB7-1>Hb, MHC-CD8-GCaMP6f-Sh K E G H M N high 0 ΔF

low

Figure 6-figure supplement 1