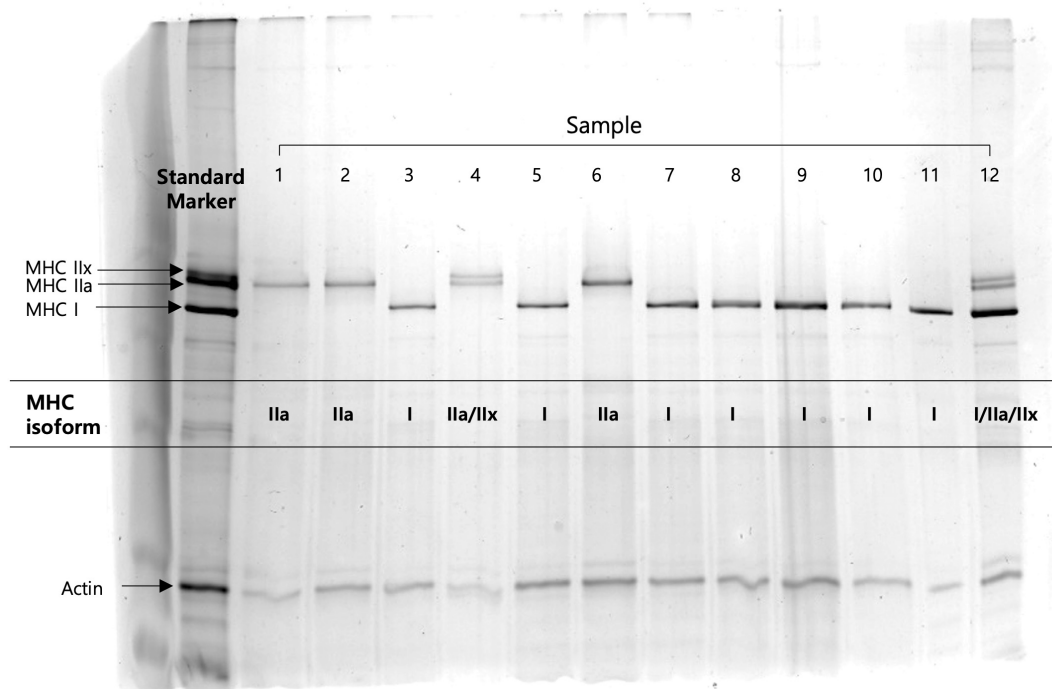


< Representative Image for silver staining >



Supplementary Figure S1. Determination of myosin heavy chain (MHC) isoform composition of single muscle fibers by SDS-PAGE with silver staining.

Representative silver-stained gel. After completion of the mechanical measurements, each single fiber was solubilized and its MHC isoform composition was determined by SDS-PAGE followed by silver staining. Standard, reference sample containing human MHC I, IIa and IIx isoforms loaded as a migration standard on every gel. Arrows indicate the positions of MHC IIx, MHC IIa, MHC I and actin. The band migrating immediately above MHC IIa — resolved in the hybrid fiber lanes (samples 4 and 12) — was designated MHC IIx; human limb skeletal muscle does not express MHC IIb. Fibers showing a single MHC band were classified as type I or type IIa, whereas fibers showing more than one band were classified as hybrid fibers (samples 4 and 12) and were excluded from the fiber-type-specific analyses reported in the main text. The MHC isoform assignment of each lane is indicated beneath the corresponding lane. Gels were imaged using a ChemiDoc XRS system (Bio-Rad Laboratories, Hercules, CA, USA); linear brightness and contrast adjustments were applied uniformly to the whole image, and no region was enhanced, obscured or otherwise altered selectively.