Journal of Muscle Research and Cell Motility 7, 475-480 (1986)

## Errata

BÄHLER, M., WALLIMAN, T.\* & EPPENBERGER, H. M. (1985) Myofibrillar M-band proteins represent constituents of native thick filaments, frayed filaments and bare zone assemblages. *Journal of Muscle Research* and Cell Motility 6, 783–800. The Publishers and Editors would like to apologize to Dr Bähler and his colleagues for the poor quality of the halftone figures in the above paper. The plates are reproduced on this and the following pages with their captions.



**Fig. 1.** Characterization of polyclonal, monospecific antibodies against M-protein and myomesin, purified by elution from antibody–M-band protein complexes electrophoretically blotted to nitrocellulose. (a) Sodium dodecylsulphate 5% (w v<sup>-1</sup>) PAGE of chicken pectoralis major myofibrils. Stained for protein with Coomassie blue. Myomesin and M-protein migrate slightly faster than myosin heavy chain, the most prominent band. (b) Protein bands after electrophoretical transfer to nitrocellulose and incubation with rabbit anti-chicken myomesin. (c) Anti-M-protein. (d) Initial mixture of anti-M-protein–myomesin antibodies; second antibody: fluorescein labelled goat anti-rabbit IgG. (e, f) Isolated myofibrils stained by the indirect immunofluorescence technique with the monospecific antibody against myomesin. (g, h) Against M-protein. Paired photographs are phase contrast (e, h); and fluorescence (g, f). Scale bar:  $5 \mu m$ .

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**Fig. 2.** Negatively stained preparations of isolated A-segments, native thick filaments and frayed filaments. (a) Isolated A-segment, showing the 11 known nonmyosin protein stripes in each half of the A-band and the prominent M1 subline in the middle of the M-band. (a') Enlargement of the M-band region. Arrowheads point to the M4 and M4' m-bridges flanking the central, most prominent substriation M1. Substriations M2 and M2' as well as M3, M3' are clearly resolved. Substriations M6 and M6' beyond M4 and M4' are only faint. (b) Native thick filaments with a defined bare zone and cuff-like extra material in the M-region (arrows). (c) Native thick filaments partially frayèd into three subfilaments, leaving intact only the bare zone region. Cuff-like extra material (arrows) also visible. Insets show disassembled native thick filaments (frayed bare zone assemblages) which were produced under the same conditions. All samples after adsorption on glow discharged carbon films and negative staining with 1% uranyl acetate. Scale bars: 0.1 μm.

## Attachment of M-band proteins



**Fig. 3.** Negatively stained bare zone assemblages and completely dissolved and subsequently reassembled filaments. (a) Bare zone assemblages formed by raising the KCl concentration to 0.2 M. (b) Bare zone assemblages formed at pH 8.0 (see Materials and methods). Arrows indicate cuff-like extra material in the middle of the bare zones. (c) Native thick filaments completely dissolved and subsequently reformed (synthetic filaments). Note the absence of a defined bare zone region. Scale bars: 0.1 µm.



**Fig. 4.** Indirect gold labelling for M-band proteins of isolated native thick filaments (negative staining). Native thick filaments were incubated with (a) anti-M-protein IgG; (b) anti-myomesin IgG; (c) anti-MM-CK IgG; (d) preimmune IgG, followed by goat anti-rabbit IgG–Gold. Arrows indicate bare zone regions. Scale bars: 0.1 µm.



**Fig. 5.** Indirect gold labelling for M-band proteins of bare zone assemblages and repolymerized bare zone assemblages (negative staining). (a) Bare zone assemblages formed at 0.2 M KCl incubated with anti-M-protein IgG; (c) anti-myomesin IgG; (e) anti-MM-CK IgG; (g) preimmune IgG, followed by goat anti-rabbit IgG–gold. Arrows indicate bare zone regions. Bare zone assemblages formed at pH 8.0 to which myosin was allowed to repolymerize by changing pH, referred to as repolymerized bare assemblages (Niederman & Peters, 1982), incubated with (b) anti-M-protein; (d) anti-myomesin; (f) anti-MM-CK IgG; followed by goat anti-rabbit IgG–gold. Arrows indicate bare: 0.1 μm.

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**Fig. 6.** Indirect gold labelling for M-protein and myomesin of 'frayed' bare zone assemblages and disassembled-reassembled filaments (negative staining). (a) 'Frayed' bare zone assemblages formed in 2 mM Hepes, pH 7.4, incubated with anti-M-protein; (b) anti-myomesin IgG; followed by goat anti-rabbit IgG–gold. (c) Native thick filaments completely disassembled and subsequently reassembled after incubation with both anti-M-protein and anti-myomesin IgG; followed by protein A–gold. Note the lack of specific labelling. Scale bars: 0.1 µm.