

Mouse myosin-19 is a plus-end-directed, high-duty molecular motor

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Legend for Supplemental Movies

Movie S1. Actin filaments translocated by M19-1IQ-Avi. Actin filaments were labeled with Rhodamine phalloidin. The assay conditions were 25 mM Imidazole (pH7.5), 100 mM KCl, 5 mM MgCl₂, 1 mM EGTA, 100 mM β-mercaptethanol, 2.5 mg/ml glucose, 2 U/μl catalase, 40 U/ml glucose oxidase, 0.5% Methyl cellulose, 6 μM RLC9, 6 μM RLC12b, and 2 mM ATP at room temperature (about 25°C). The movement of F-actin was recorded under an Olympus IX71 inverted fluorescent microscope. Frame rates: 3 s⁻¹. Play rate: 12 s⁻¹. Frame width is 100 μm.

Movie S2. Actin filaments translocated by M19-2IQ-Avi. Actin filaments were labeled with Rhodamine phalloidin. The assay conditions were the same as Movie S1. Frame rates: 3 s⁻¹. Play rate: 12 s⁻¹. Frame width is 100 μm.

Movie S3. Actin filaments translocated by M19-3IQ-Avi. Actin filaments were labeled with Rhodamine phalloidin. The assay conditions were the same as Movie S1. Frame rates: 3 s⁻¹. Play rate: 12 s⁻¹. Frame width is 100 μm.

Movie S4. Actin filaments translocated by Myo5a-ΔT. Actin filaments were labeled with Rhodamine phalloidin. The assay conditions were the same as Movie S1, except that 6 μM RLC9 and 6 μM RLC12b were replaced with 12 μM CaM. Frame rates: 1 s⁻¹. Play rate: 12 s⁻¹. Frame width is 100 μm.