

T Lymphocytes Orient against the Direction of Fluid Flow during LFA-1-Mediated Migration

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Lymphocyte Migration against Fluid Flow

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Supplemental Movie Legends

Movie S1: Live observation of effector T lymphocytes versus shear stress. The shear stress is increased from 0 to 12, and 40 dyn.cm^{-2} . The flow is directed from top to bottom. Bright field images were collected every 10 s. The movie is presented with 10 images per s. (Movie accelerated X100) - Size of the image: 870x650 μm^2 .

Movie S2: Live observation of the behavior of effector T lymphocytes when the flow is stopped. The lymphocytes are first shown moving against a shear stress of 8 dyn.cm^{-2} . The flow is then stopped and the lymphocytes resume randomly oriented migration within 30 s. Bright field images were collected every 10 s. The movie is presented with 10 images per s. (Movie accelerated X100) - Size of the image: 870x650 μm^2 .

Movie S3: Live observation of the behavior of primary T lymphocytes under a shear stress of 4 dyn.cm^{-2} . Bright field images were collected every 10 s. The movie is presented with 10 images per s. (Movie accelerated X100) - Size of the image: 870x650 μm^2 .

Movie S4: Live observation of the behavior of HSB2 T lymphocytes under a shear stress of 8 dyn.cm^{-2} . Bright field images were collected every 10 s. Images have first been inverted and the background subtracted. This step is necessary for cell tracking purposes. The movie is presented with 10 images per s. (Movie accelerated X100) - Size of the image: 870x650 μm^2 .

Movie S5: Live observation of the behavior of neutrophils under a shear stress of 8 dyn.cm^{-2} . Bright field images were collected every 10 s. The movie is presented with 10 images per s. (Movie accelerated X100) - Size of the image: 870x650 μm^2 .