



A Method To Determine The Throughput Speed Of A Pore

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The Invention

A method (100) can be provided to determine the throughput speed v of at least one pore (1), comprising: • feeding (110), using a driving force F , a filiform calibration element (2) through the pore (1), said calibration element (2) having a plurality of markers (21) spaced apart by known distances (22) and configured to produce an interaction event (3) that transmits a signal away from the pore (1) upon interaction with the pore (1); • detecting (120) a plurality of interaction events (3); and determining (130) a time interval Δt between successive interaction events (3), and/or a frequency ω of interaction events (3). Also provided is a filiform calibration element (2), configured to pass through a pore (1) of at most 5 diameter and comprising a plurality of light sources, configured to absorb excitation light of a first wavelength λ_1 and to emit light of a second wavelength λ_2 in response to said excitation light, as markers (21). Further provided is a liquid solution (20) as a tool for determining the throughput speed v of at least one pore (1), comprising a solvent (24) and a plurality of filiform calibration elements (2).

Tech Fields

- [Analytical Instrumentation, Methods & Materials : Microscopy.](#)
- [Research Tools : DNA & RNA tools](#)

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