

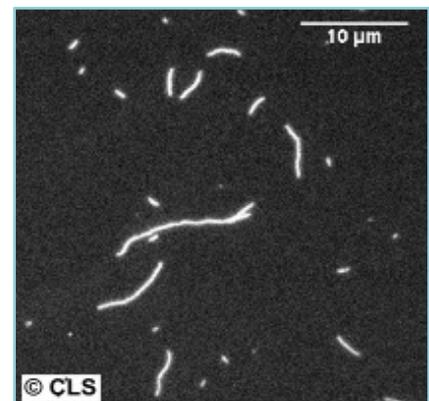
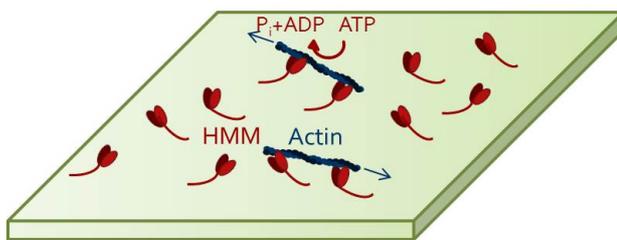
Motility Assay Kit - MobIVA



Versatile Tool to study Enzyme Kinetics and Molecular Motors

Skeletal muscles are necessary for the beating of the heart, the involuntary actions of smooth muscle, the voluntary movements of our body and for keeping positions. The human body contains up to 30% muscle tissue, which is formed by muscle cells. These cells comprise mainly actin and the motor protein myosin. The acto-myosin interaction under Ca^{2+} -regulation leads to muscle contraction and thus to all movements.

In the *in vitro* Motility Assay, Myosin (as HMM = Heavy Meromyosin) is immobilized on a coated cover slide and propels fluorescently labeled Actin filaments under ATP hydrolysis.



The sliding speeds of the actin filaments can be analyzed using an intensified CCD-camera and an image analysis software. Having recorded the track length, this data can be easily transformed to a sliding speed as the record time and frame rate are known.

The Motility Assay kit can be applied in many ways such as:

Biochemistry: Investigations with respect to enzyme function; transformation of chemical into kinetic energy.

Biophysics / Biophysical Chemistry: Kinetic experiments

Molecular Biology / Protein interaction: Interaction of two proteins; protein structure

Physiology / Muscular function / Molecular Motors: Physiology of muscle contraction

Bionic: The molecular motor as model for or implemented as a 'machine'

Biodiversity: Different behavior of motor proteins from different species

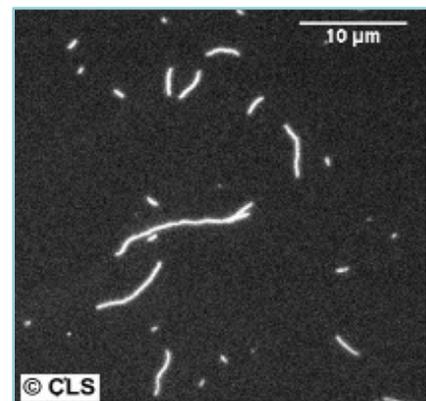
In vitro screening: Test system for pharmaceutical compounds

Microscopy: Principles of fluorescence microscopy

Due to its ease of use this Motility assay kit represents the ideal kit system for scholar as well as student practical courses. Setup the fluorescence microscope equipped with a camera and Personal computer, put the proteins and flow cells on ice, and get started.

The same holds for your experimental or routine investigations in your lab - don't waste your precious time with protein purifications and labeling procedures, just use this kit components for your exciting Motility experiments.

One MobIVA Motility Assay kit comprises of up to 5 Flow cells, the complete set of reagents to allow conductance of up to ten independent assays, as well as a short instruction and a detailed manual.



Ordering information:

850953-K MobIVA kit 2x2 Flow cells	850953-K MobIVA kit 5x2 Flow cells	850954-K MobIVA kit 10x2 Flow cells
---	---	--

Shipment and Storage conditions

The MobIVA kits are shipped on dry ice at about -70°C. The kit components MUST be stored at -20°C at all times.

More products that might be of interest

- F-Actin
- G-Actin
- Customer-requested kit
- F-Actin, Myosin and HMM of differing origin / species

http://www.clsgmbh.de/c273_Proteine_Zytoskelettproteine.html

CLS Cell Lines Service GmbH
Dr.Eckener-Strasse 8
69214 Eppelheim
Germany

Phone: +49(0)6221 700799
Fax: +49(0)6221 700717
E-Mail: info@clsgmbh.de

Certified ISO 9001:2008



All products are intended for research use only. Not to be used in human beings. For more information you may browse our website: www.clsgmbh.de

Copyright CLS GmbH, V1/2016/0216-M01