

Materials List for:

Kinematics and Ground Reaction Force Determination: A Demonstration Quantifying Locomotor Abilities of Young Adult, Middle-aged, and Geriatric Rats

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URL: <https://www.jove.com/video/2138>

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Materials

Name	Company	Catalog Number	Comments
Low load miniature force platform	AMTI	HE6X6	http://amti.biz/PDFDownloads/0908HE6x6.pdf
Vicon Motus	Vicon	Vicon Motus software	http://www.vicon.com/applications/animal.html The force platform can be purchased as an integrated package with the Vicon Motus system.
Vicon Motus KineCalc	Vicon	Vicon Motus KineCalc software	http://www.vicon.com/applications/animal.html Proprietary software compatible with Vicon Motus data, thus enabling direct and customizable data calculations.
Video Cameras	Vicon	Varies depending upon needs	http://www.vicon.com/applications/animal.html A minimum of 4 cameras are required for bilateral 2D or 3D imaging of hindlimb kinematics during rat locomotion. Cameras that sample at 60 Hz are sufficient for rats locomoting between 60 and 90 cm/s. High speed cameras will permit identification of very small, yet possibly important, differences in interlimb coordination.
Calibration volume or frame	Vicon	Custom	http://www.vicon.com/applications/animal.html An appropriate calibration volume must be purchased and used for calibrating the coordinates prior to performing videography each and every time of new data collection or if any of the cameras are moved. This dimensions of this calibration volume are based upon the field of view being examined.
Reflective tape	3M	NA	Can be purchased bulk through a 3M distributor or on an as-needed basis from VICON http://solutions.3m.com/en_US/?WT.mc_id=www.3m.com/us

			http://www.vicon.com/applications/animal.html
Cheerios	General Mills	Cheerios	http://www.cheerios.com/
Tissue adhesive	3M		Can be purchased through a 3M distributor http://solutions.3m.com/en_US/?WT.mc_id=www.3m.com/us