

Magnetic Tweezers in a Microplate Format

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Citation

dos Santos, Á., Toseland, C.P. Magnetic Tweezers in a Microplate Format. *J. Vis. Exp.* (180), e62994, doi:10.3791/62994 (2022).

Date Published

February 9, 2022

DOI

10.3791/62994

URL

jove.com/video/62994

Materials

Name	Company	Catalog Number	Comments
24 well glass-bottom microplate	Cellvis	P24-1.5H-N	Multiple sources are available. Unless needed, it is best to avoid treated surfaces and we use Imaging grade glass N1.5.
Anti-RFP antibody	Abcam	ab290	Multiple sources are available but must ensure there is minimal reactivity with GFP.
Bench top light microscope	Optika	IM-3	
Bench top Rotator	Cole-Palmer-Stuart	SB3	
Biotin-BSA	Sigma Aldrich	A8549	
CAD Software - Sketch Up Educator	Sketch Up		Alternative CAD softwares can be used. Users should ensure the file formats are compatible with their 3D printer.
Dynabeads Protein A	Fisher Scientific	10746713	2.8 µm paramagnetic beads with recombinant Protein A
Impact contact adhesive	EVO-STIK		
MagnaRack magnetic separation rack	ThermoFisher Scientific	CS15000	Magnetic Isolator
NaCl	Fisher Scientific	10316943	
Neodymium N42 5mm cube Magnets	Supermagnete	W-05-N	
Plate Reader - ClarioStar	BMG Labtech		All plate reader systems can be used where measurements are possible from under the microplate. The magnet lid excludes standard measurements from above
Streptavidin	Sigma Aldrich	189730	
Tris-HCl	Fisher Scientific	10142400	
Ultimaker PETG Filament	Ultimaker		
Ultimaker S3 - 3D printer	Ultimaker		