

Materials List for:

# Mapping the Binding Site of an Aptamer on ATP Using MicroScale Thermophoresis

Clemens Entzian<sup>1</sup>, Thomas Schubert<sup>1</sup>

<sup>1</sup>2bind GmbH

Correspondence to: Thomas Schubert at [schubert@2bind.de](mailto:schubert@2bind.de)

URL: <https://www.jove.com/video/55070>

DOI: [doi:10.3791/55070](https://doi.org/10.3791/55070)

## Materials

Name	Company	Catalog Number	Comments
Aptamer binding buffer			20 mM Tris pH 7.6; 300 mM NaCl; 5 mM MgCl <sub>2</sub> ; 0.01% Tween-20
Fluorescently labeled ATP aptamer	IDT, Leuven, Belgium		sequence: DH25.42 50-Cy5-CCTGGGGGAGT-ATTGCGGAGGAAGG-3
ATP	Sigma Aldrich, Germany	A2383	10 mM stock solutions stored at -20 °C
ADP	Sigma Aldrich, Germany	A2754	10 mM stock solutions stored at -20 °C
AMP	Sigma Aldrich, Germany	A2252	10 mM stock solutions stored at -20 °C
Adenine	Sigma Aldrich, Germany	A8626	10 mM stock solutions stored at -20 °C
SAM	Sigma Aldrich, Germany	A7007	10 mM stock solutions stored at -20 °C
dATP	Sigma Aldrich, Germany	11934511001	10 mM stock solutions stored at -20 °C
CTP	Sigma Aldrich, Germany	C1506	10 mM stock solutions stored at -20 °C
GTP	Sigma Aldrich, Germany	G8877	10 mM stock solutions stored at -20 °C
Monolith NT.115	NanoTemper Technologies, Munich, Germany	MO-G008	Blue/Red Channel MST device with standard detector, Monolith NT115 pico is MST device with high sensitivity detector
Monolith NT.115 capillaries Standard	NanoTemper Technologies, Munich, Germany	MO-K002	
Eppendorf PCR tubes	Eppendorf, Germany	30124537	
Monolith control software. 2.1.33, pre-installed on the device	NanoTemper Technologies, Munich, Germany		
MO.affinity analysis v2.1.1	NanoTemper Technologies, Munich, Germany		
Kaleidagraph 4.5.2	Synergy Software		