

WuXi AppTec - Discovery Biology Platform

Ready-To-Go Assays



General Information

--- Fast Track to Characterize Small Molecule Target Interaction ---



Established Assays

Optimized assay conditions



Flexible

Single/multiple assay in parallel



Cost-effective

Low budget, high quality data



Fast Turnaround Time

Up to 2 weeks

--- nanoDSF • MST • SPR • ADP-Glo • Nucleotide-exchange ---

Protein Supply

Established protein construct in house

- Tailored high quality assay grade proteins
 - Protein QC: SDS-PAGE, aSEC, MS
- Complete protein supply included

Assay Initiation & Measurements

Established assay conditions

- Established labeling/coupling method
 - Published *non-covalent** tool compounds
- Up to 3 T_m s / K_d s / IC_{50} s included

Results & Report

A tabulated report included

Extended report available including measured curves, assay conditions, analysis and scientific summary in pdf-format

Available Ready-To-Go Assays

Protein Production, MST/ TRIC, nanoDSF, SPR, Biochemical and Cell-based Assay

Target	UniProt ID	PP	MST/TRIC	nanoDSF	SPR	Biochemical Assay	Cell-based assay
ALK	Q9UM73	√	√	√	√	√	
AKT1	P31749	√	√	√	–	√	√
BTK	Q06187	√	√	√	√	√	
BLM	P54132	√	√	√	√	√	
BRD4-BD2	O60885	√	√	√	–		
CDK2	P24941	√	√	√	√		
CCNA2/CDK2 Complex	P20248/ P24941	√	√	√	√	√	
CCNE1/CDK2 Complex	P24864/ P24941	√	√	√	√	√	
CCNA2	P20248	√	√	√	–		
CCNE1	P24864	√	√	√	–		
CDK4/CCND1 Complex	P11802/ P24385	√	√	√	developing		
CCNH/CDK7 Complex	P50613	√	√	√	–	√	
CKS1B-SKP1-SKP2	P63208/ P63208/ P61024	√	√	√	–		
CRBN/DDB1	Q96SW2/Q16531	√	√	√	√	√	√
cREL	Q96HD1	√	√	√	–		
DOCK5	Q9H7D0	√	√	√	–	√	
EGFR	P00533	√	√	√	–	√	
FGFR2	P21802	√	√	√	–	√	
GRB2	P62993	√	√	√	–		

Available Ready-To-Go Assays

Protein Production, MST/ TRIC, nanoDSF, SPR, Biochemical and Cell-based Assay

Target	UniProt ID	PP	MST/TRIC	nanoDSF	SPR	Biochemical Assay	Cell-based Assay
HDAC-2	Q92769	√	√	√	–		
KIT	P10721	√	√	√	–	√	
KRAS	P01116	√	√	√	√	√	√
MALT1	Q9UDY8	√	√	√	–		
NLRP3	Q96P20	√	√	√	√	√	√
NRAS	P01111	√	√	√	√	√	√
p38	Q15759	√	√	√	–		
PIK3CA/PIK3R1 Complex	P42336/ P27986	√	√	√	√	√	
PolQ Polymerase Domain	O75417	√	√	√	–	√	
PolQ Helicase Domain	O75417	√	√	√	–	√	
PRMT5/WDR77	O14744 / Q9BQA1	√	√	√	√	√	
RECQL	P46063	√	√	√	√	√	
RECQL4	O94761	√	√	√	–		
SHP2	Q06124	√	√	√	–		
SIK3	Q9Y2K2	√	√	√	–	√	
SLC2A1 (GLUT1)	P11166	√	√	√	–		
SMARCA2	P51531	√	√	√	–	√	
SOS1	Q07889	√	√	√	–	√	

Available Ready-To-Go Assays

Protein Production, MST/ TRIC, nanoDSF, SPR, Biochemical and Cell-based Assay

Target	UniProt ID	PP	MST/TRIC	nanoDSF	SPR	Biochemical Assay	Cell-based Assay
STAT6	P42226	√	√	√	√		√
STAT3	P40763	√	–	√	√		√
STAT4	Q14765	√	–	–	√		√
STING	Q86WV6	√	√	√	√		√
TCEB1/TCEB2/VHL Complex	Q15369/ Q15370/ P40337	√	√	√	√		
TP53	P04637	√	√	√	√		
USP5	P45974	√	√	√	√		
USP7	Q93009	√	√	√	√	√	√
WEE1	P30291	√	√	√	–	√	
WRN	Q14191	√	√	√	√	√	

Case Studies

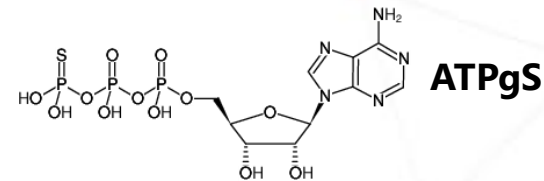
Biophysical and Biochemical Assays (tool compound measurements)

Protein Quality Control Data

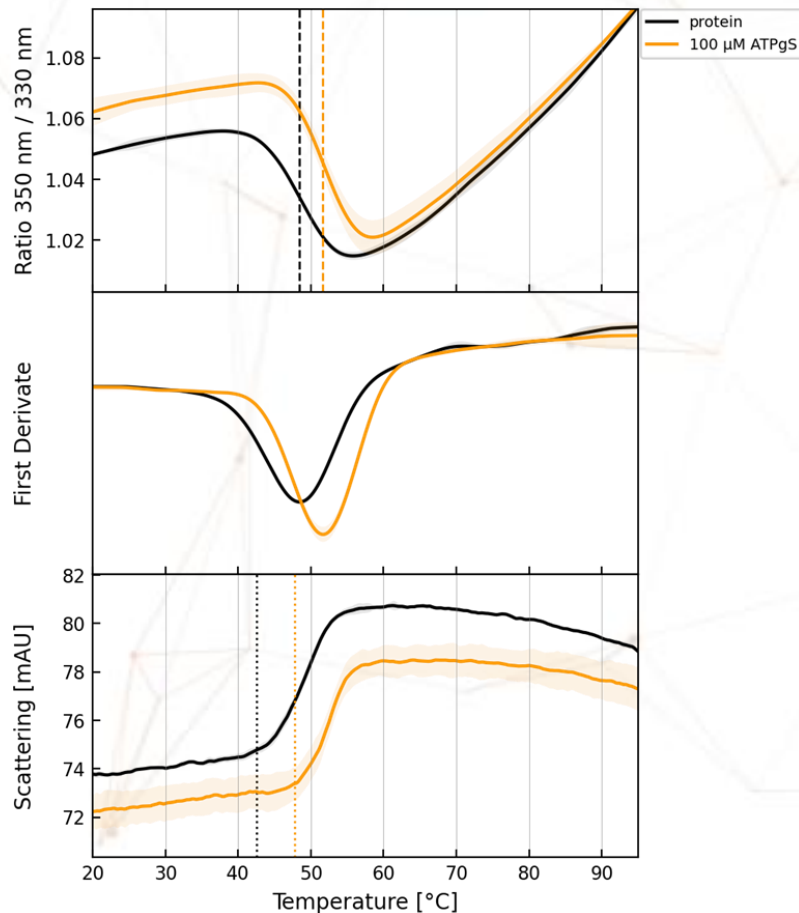
- ✓ WRN
- ✓ STAT6
- ✓ CDK4-CyclinD1

Biophysical & Biochemical Characterization of WRN Helicase

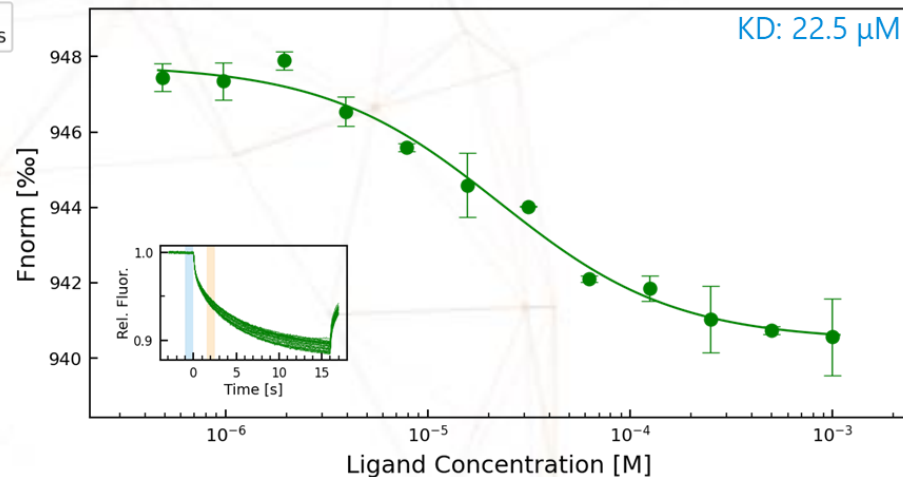
WRN Helicase vs. ATPgS



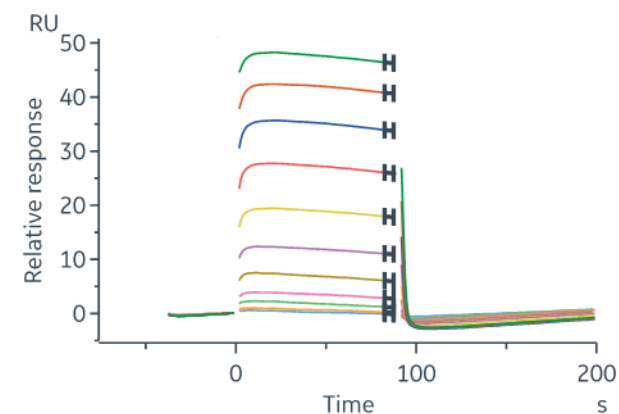
LabelFree TSA (nanoDSF)



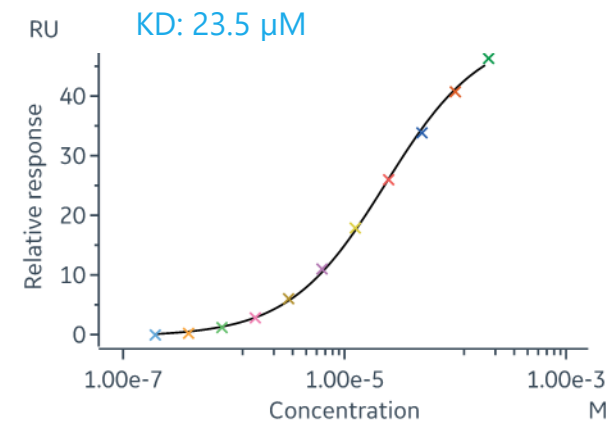
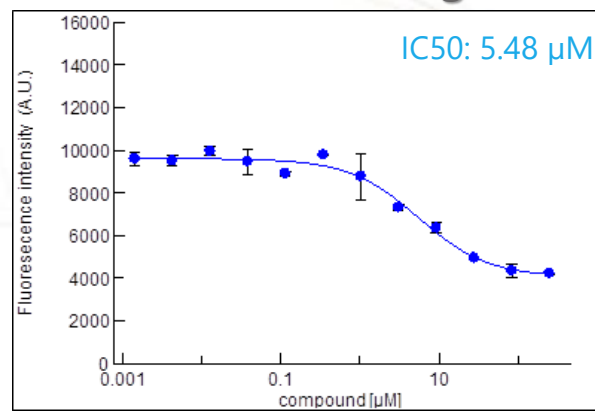
Labeled MST



SPR



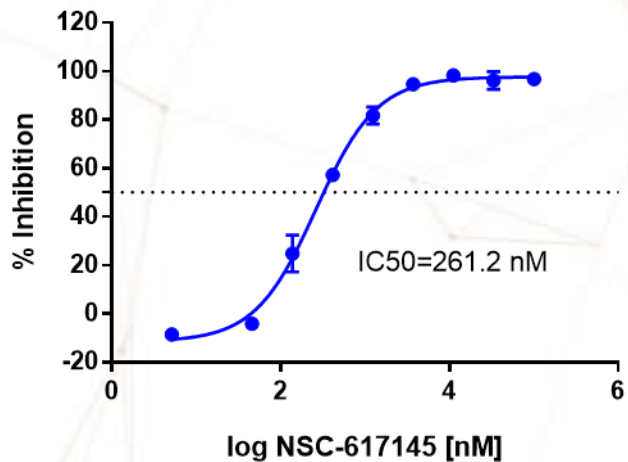
DNA unwinding



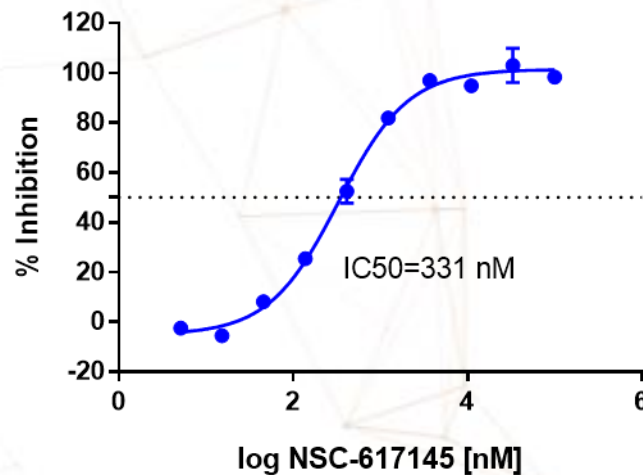
Biophysical & Biochemical Characterization of WRN

WRN vs. NSC-617145

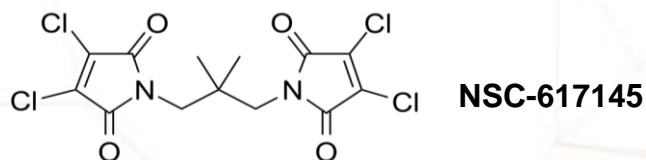
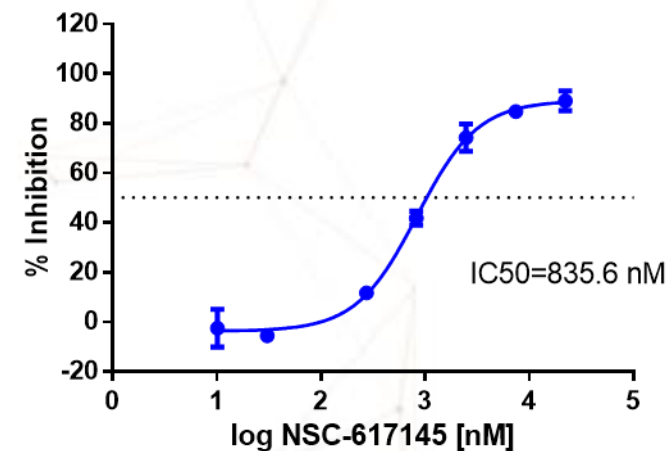
ADPGlo



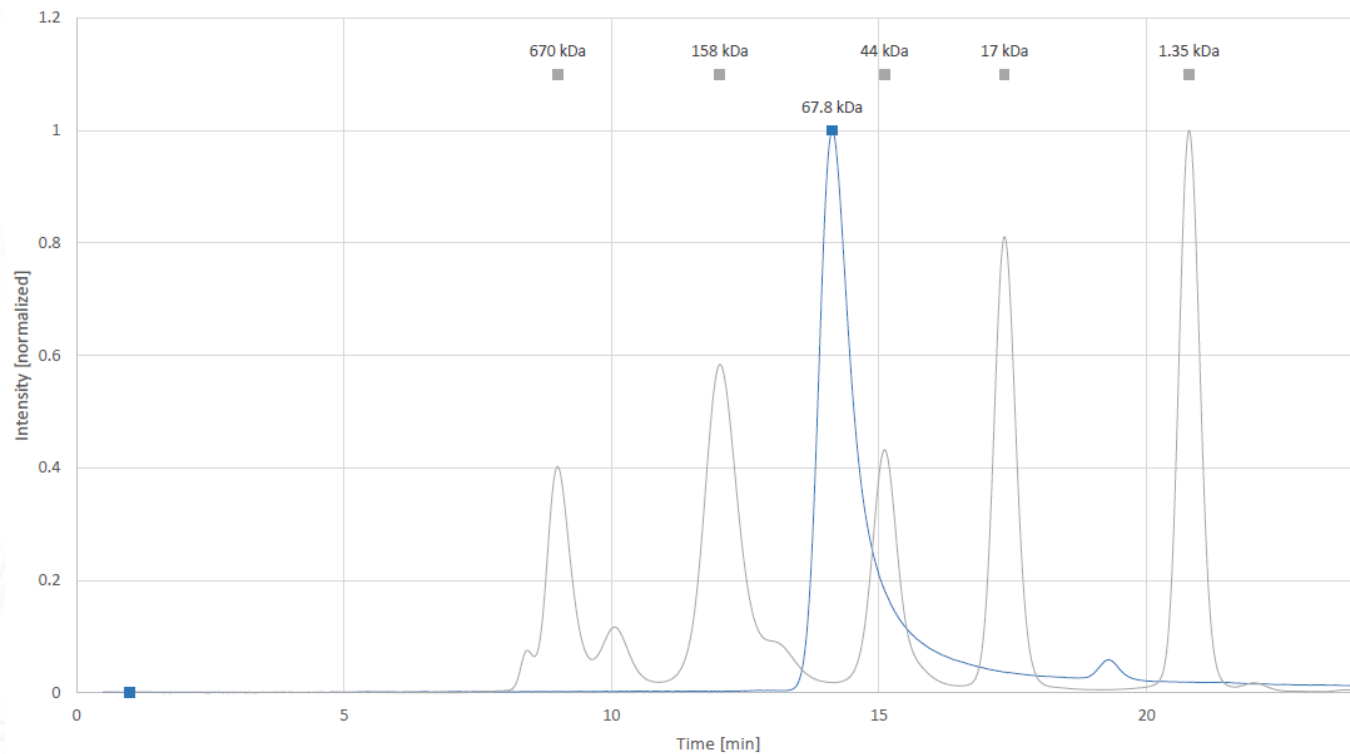
TR-FRET



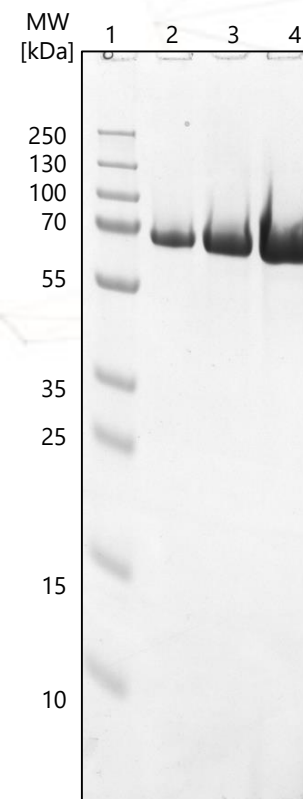
FI unwinding assay



Purification Quality Control Data



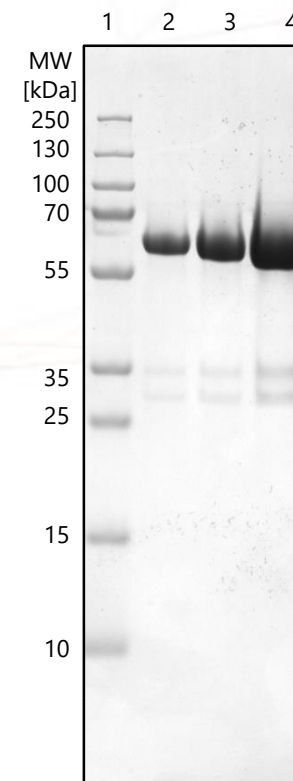
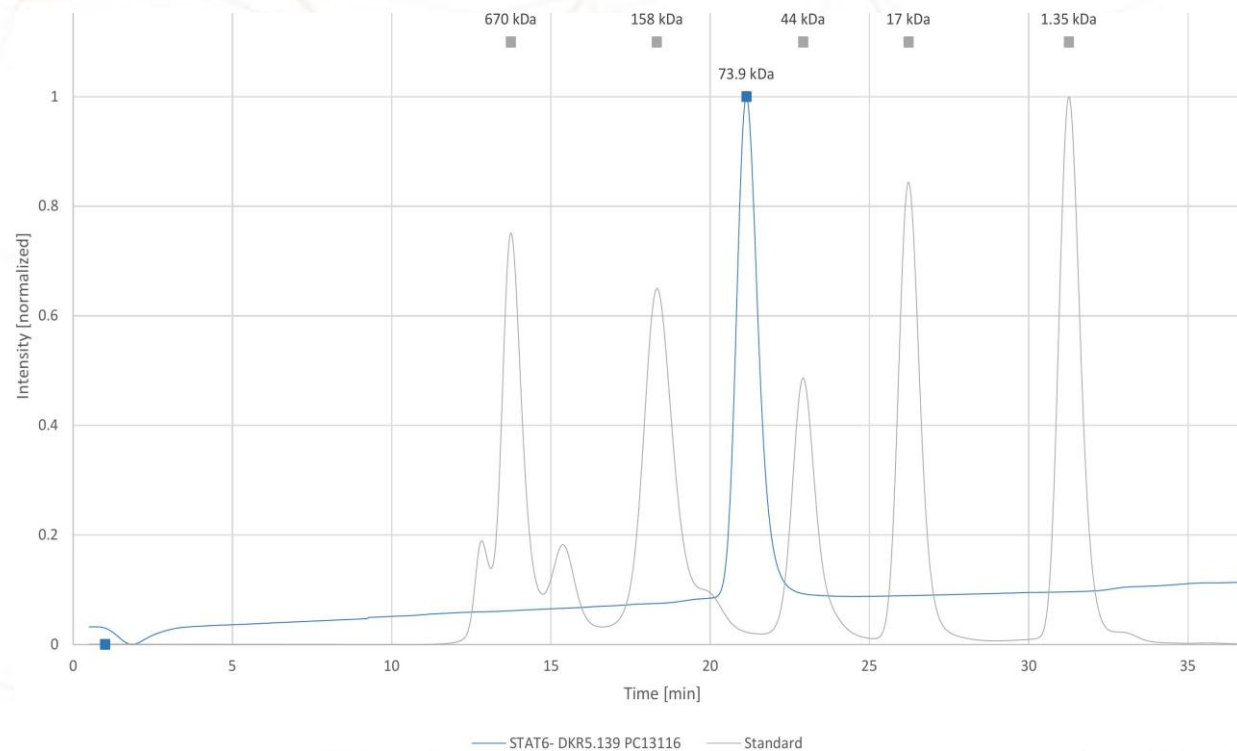
SDS-PAGE



- 10% Tris-Glycine gel
- Reducing condition
- Coomassie stained

Lane	Quantity
1	Marker
2	1 μ g
3	2 μ g
4	5 μ g

Purification Quality Control Data



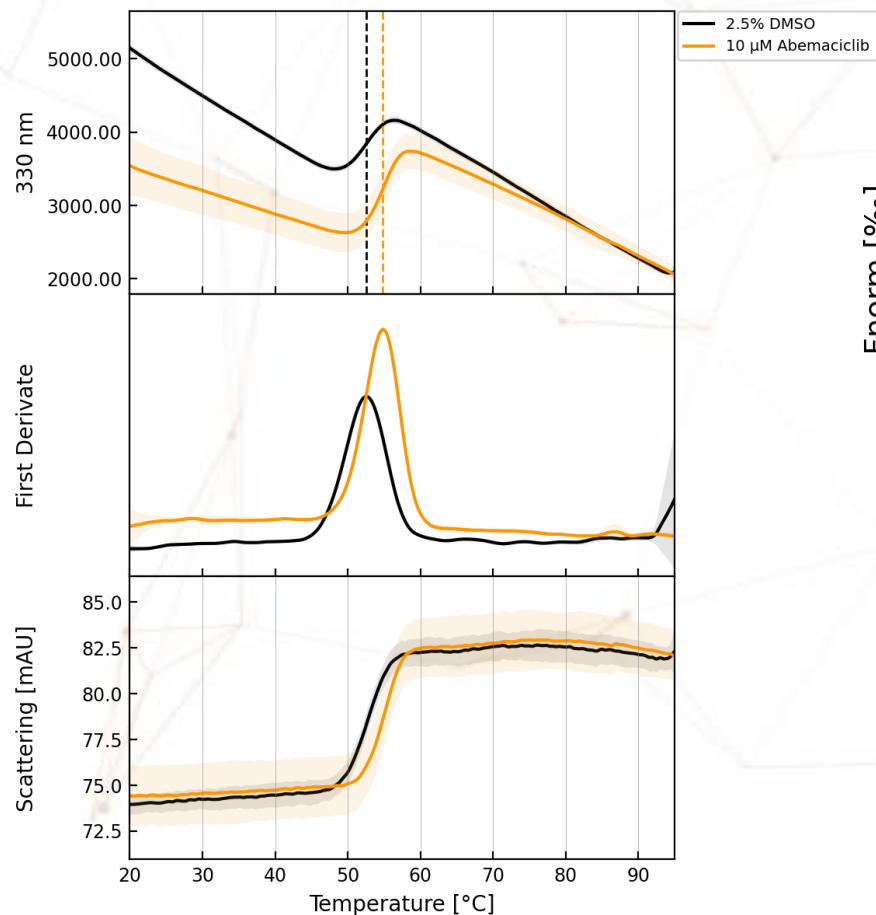
- 10% Tris-Glycine gel
- Reducing condition
- Coomassie stained

Lane	Quantity
1	Marker
2	1 μ g
3	2 μ g
4	5 μ g

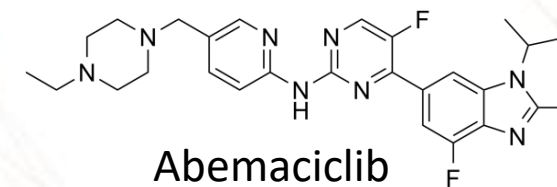
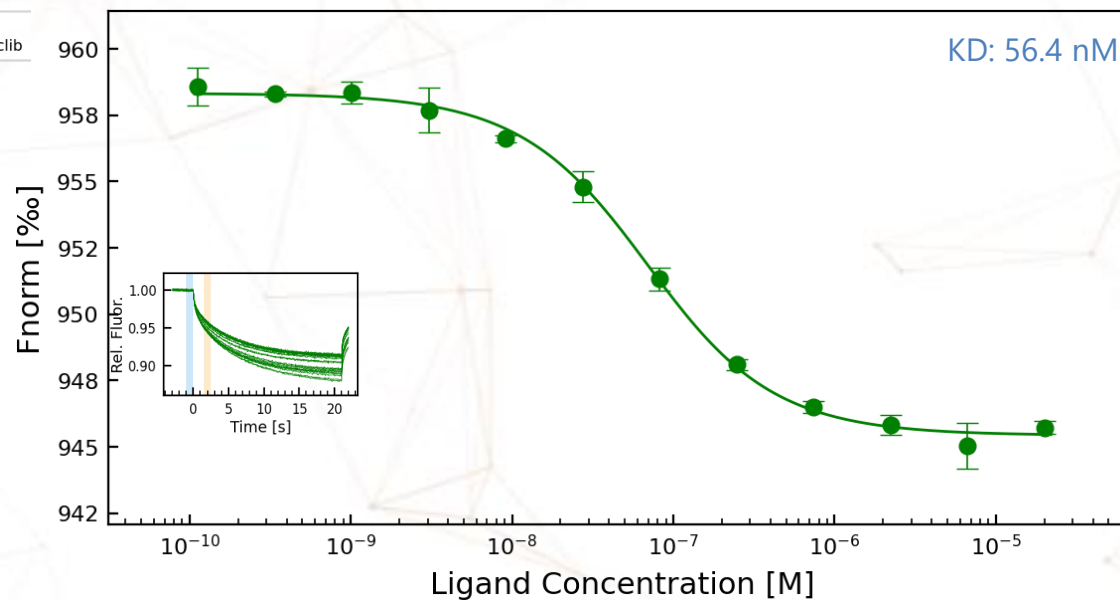
Biophysical Characterization of CDK4/Cyclin D1

CDK4/Cyclin D1 vs. Abemaciclib

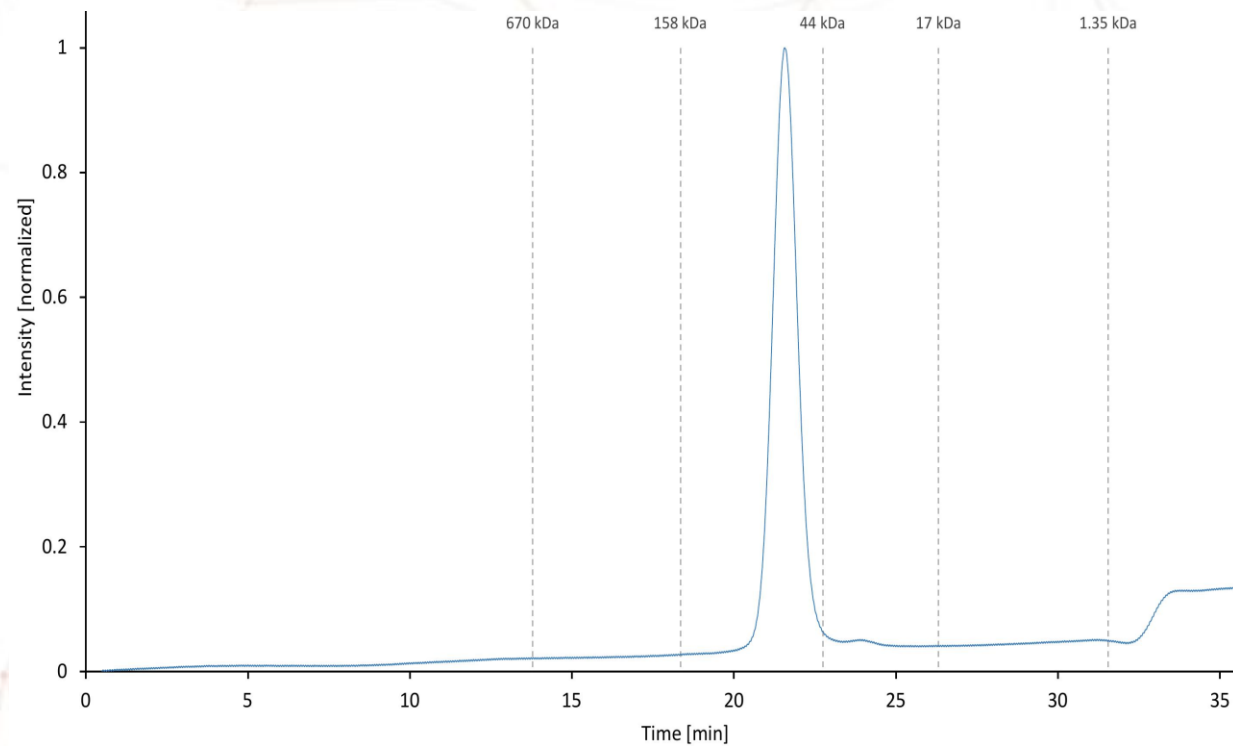
LabelFree TSA (nanoDSF)



Labeled MST



Purification Quality Control Data



SDS-PAGE

MW [kDa]

1 2 3 4

250
130
100
70
55
35
25
15
10

- 10% Tris-Glycine gel
- Reducing condition
- Coomassie stained

Lane	Quantity
1	Marker
2	1 μ g
3	2 μ g
4	5 μ g

Improving Health. Making a Difference.

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