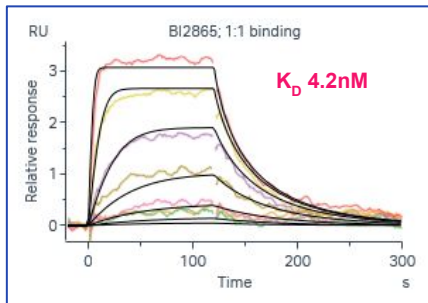
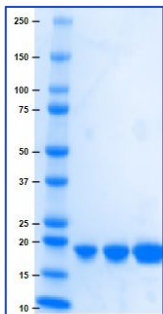


# Biophysics at Arctoris- case study

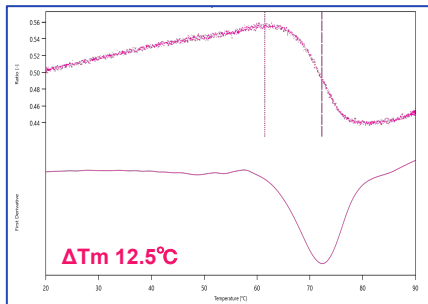
## SPR



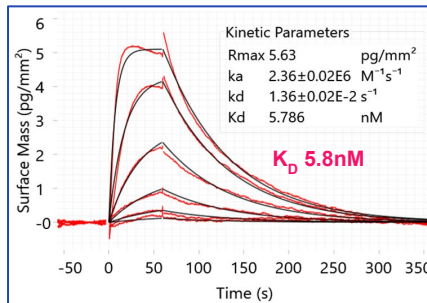
Purified KRAS  
(GDP)- SDS PAGE



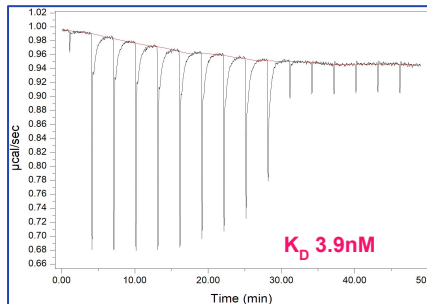
## nanoDSF



## GCI



## ITC



Literature reported  $K_D$ (ITC) 6.9 nM

## Partner

Internal Case study

## Background

BI-2865 is a well characterized small molecule ligand that binds to KRAS (GDP) with high nM affinity. Using in-house produced KRAS (2-166), we characterize the binding interaction

## Aim

Showcase Arctoris' ability to reproduce literature published data using a suite of biophysical tools.

## Our Approach

In-house expressed KRAS wt was immobilized on a CM5 sensor chip (SPR and GCI), and BI-2865 was applied at increasing concentrations. Data were fitted to 1:1 binding model. For ITC measurements, BI-2865 at 10x molar excess was titrated into KRASwt. Affinity was obtained from isotherms by fitting data to a 1:1 binding model. Thermal Shift assay was performed by incubating BI-2865 with a 10x molar excess of KRASwt.  $\Delta T_m$  was calculated using KRAS wt as reference.

## Value

- Data underlines Arctoris' capabilities in using orthogonal biophysical tools to characterize molecular interactions