

# Quotation: Q1-P1-PMC Advanced Technology

PMC Advanced Technology Sudipto Munshi, Ph.D. Junior Scientist 1288 Route 73 South Mount Laurel, NJ 08054 USA

Quote No.: Q1-P1-PMC Advanced Technology
Quotation Date: 22nd August 2016 (valid for 60 days)

Customer: Sudipto Munshi, Ph.D.

Email: Email: sudipto.munshi@pmc-at.com

#### **2bind GmbH**

BioPark III Josef Engert Str. 13 93053 Regensburg Tel: +49 941 9432849

Fax: +49 941 9432474 Email: info@2bind.de

## Analysis of protein-small molecule interactions using MicroScale Thermophoresis

This quote describes a MicroScale Thermophoresis Study to characterize the interaction of Sirt3 to different small molecules and their combinations. In total 7 different interactions will be characterized using the fluorescent MicroScale Thermophoresis assay. The Customer supplies 2bind with the necessary material and 2bind will perform all experiments under highest scientific standards. The project is divided into different milestones:

#### 1. Milestone: Protein labelling

In this milestone, the target protein is Alexa 647-labelled by NHS ester chemistry.

Pos.	Amount	Service provided	Net costs / amount	Sum
			in Euro	in Euro
1	1	Protein labelling	250,00	250,00

### 2. Milestone: MST establishment

In this milestone, the technical setup for the respective MST analyses are established. LED power, laser power will be optimized for each interaction. The buffers and capillaries will be chosen to minimize sticking and aggregation tendencies during the experiments, thus ensuring high quality data. If the MST establishment, for any reason, is not successful for a specific protein, the customer may exit the project and is only charged for the performed milestones

Pos.	Amount	Service provided	Net costs / amount	Discounted prize	Sum
			in Euro	in Euro	in Euro
2	1	MST establishment	150,00	0,00	0,00



### 3. Milestone: MST Binding assay

In this milestone, 7 small molecule-protein interactions are analysed by the fluorescent MST assay under highest scientific standards. Experimental setup is on the last page of this document.

Pos.	Amount	Service provided	Net costs / amount	total costs /	Sum
			in Euro	amount in Euro	in Euro
3	7	MST binding assay in	400,00	350,00	2.450,00
		technical duplicates			

Milestone 1: 250,00 Euro
Milestone 2: 0,00 Euro
Milestone 3: 2.450,00 Euro

Final costs for the analysis of 7 small molecule-protein interactions: 2.700,00 Euro

## **Project duration:**

2bind will perform the MST measurements under highest scientific standards. The project analysing 7 interactions will be finished 5-8 working days after arrival of all sample material The project will be finished with the submission of the final data reports. 2bind offers to discuss the data with the customer after finishing the project.

Please note that costs for shipping, customs or similar are not included in this quote and will be added to the final invoice.

I hope this quotation meets your expectations.

With best regards

Dr. Thomas Schubert, CEO, 2bind GmbH

Oberbank München Account number: 1001.3591.06 BLZ: 70120700, SWIFT: OBKLDEMX IBAN: DE54701207001001359106



Experiment #	Experiment name	Туре	Comments
1	Sirt3 + NAD <i>(titrate)</i>	Positive Controls	To determine <b>NAD</b> binding affinity only
2	Sirt3 + Ac-MnSOD <i>(titrate)</i>		To determine <b>Ac-MnSOD</b> binding affinity only
3	Sirt3 + DeAc-MnSOD (saturating) + NAD (titrate)		To determine NAD binding affinity in presence of saturating product (DeAc-MnSOD)
4	Sirt3 + "modulator" (SM) <i>(titrate)</i>	Co-binding experiments with saturating substrates/product and "modulator" (SM)	To determine binding affinity of <b>SM</b> only
5	Sirt3 + Ac-MnSOD <i>(saturating)</i> + "modulator" (SM) <i>(titrate)</i>		To determine binding affinity of <b>SM</b> in presence of <b>saturating peptide substrate</b>
6	Sirt3 + NAD <i>(saturating)</i> + "modulator" (SM) <i>(titrate)</i>		To determine binding affinity of <b>SM</b> in presence of <b>saturating NAD substrate</b>
7	Sirt3 + NAD (saturating) + DeAc-MnSOD (saturating) + "modulator" (SM) (titrate)		To determine binding affinity of <b>SM</b> in presence of <b>saturating NAD substrate</b> and <b>saturating product peptide</b>