

X

NPTEL

reviewer3@nptel.iitm.ac.in ▼

Courses » Interactomics

Announcements

Course

Ask a Question

Progress

Mentor

FAQ

Unit 3 - Week 2

Course outline

How to access the portal ?

Week 1

Week 2

- Lecture 6 - Basics of SPR: Experimental design
- Lecture 7 - Protein immobilization for protein-protein interaction studies
- Lecture 8 - Protein-protein interaction study: Binding analysis
- Lecture 9 - Protein-protein interaction study: Kinetic analysis
- Lecture 10: Protein-small molecule interaction study: Immobilization & binding analysis
- Download Videos
- Weekly Feedback
- Quiz : Week 2 Assignment 2
- Week 2 assignment solutions

Week 3

Week 4

Week 5

Week 6

Week 2 Assignment 2

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2018-09-12, 23:59 IST.

1) Is it essential to use multiple concentrations of the analyte for a kinetic analysis? **1 point**

- True
 False

No, the answer is incorrect.

Score: 0

Accepted Answers:

True

2) Is it possible for two different molecules to have similar affinities but different kinetics? **1 point**

- True
 False

No, the answer is incorrect.

Score: 0

Accepted Answers:

True

3) The purity of the ligand has no effect on immobilization. Is it true or false? **1 point**

- True
 False

No, the answer is incorrect.

Score: 0

Accepted Answers:

False

4) During optimisation the best analyte concentration range, which is recommended for injection? **1 point**

- 10-20 μM
 5 - 100% of R_{max}
 0.1 – 10 times of expected KD
 None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

0.1 – 10 times of expected KD

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -



A project of



In association with



Funded by

Government of India
Ministry of Human Resource Development

Powered by



- short & long kinetics
- steady state kinetics

No, the answer is incorrect.

Score: 0

Accepted Answers:

short & long kinetics

6) To calculate meaningful results in an SPR experiment it is essential to have which type of curves? **1 point**

- That go to Rmax
- That have sharp association and dissociation
- That have curvature
- With a low response

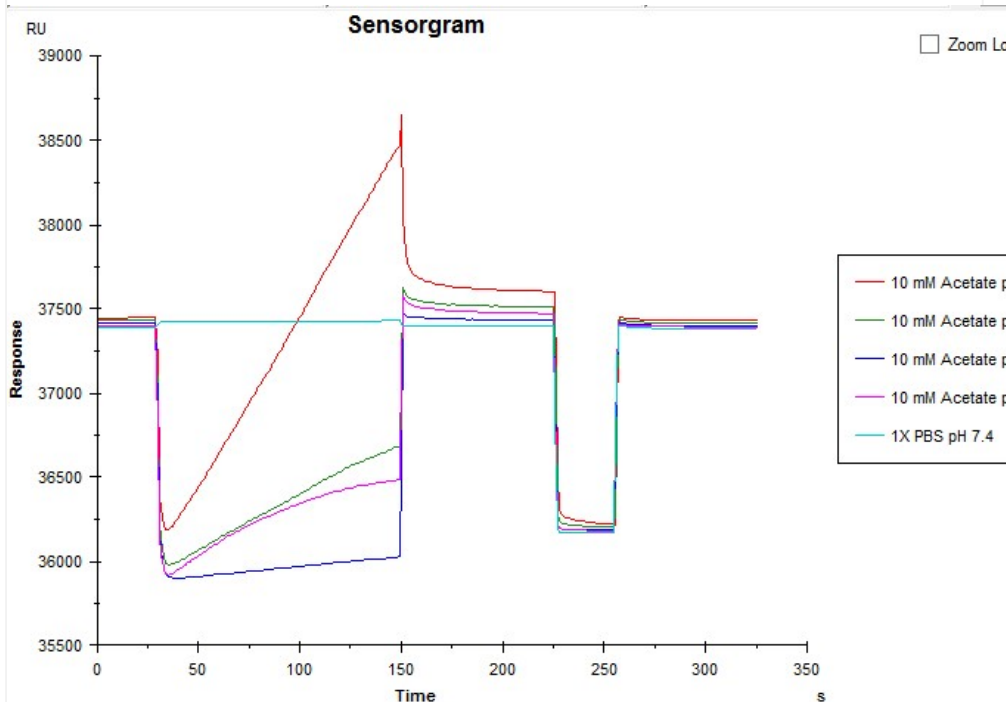
No, the answer is incorrect.

Score: 0

Accepted Answers:

That have curvature

7) Based on Figure 1 shown below, which of the buffers tested for an SPR experiment would be a good choice for performing immobilization of the ligand? **1 point**
 choice for performing immobilization of the ligand?



- 10mM Acetate pH 4.0
- 10mM Acetate pH 4.5
- 10mM Acetate pH 5.0
- 10mM Acetate pH 5

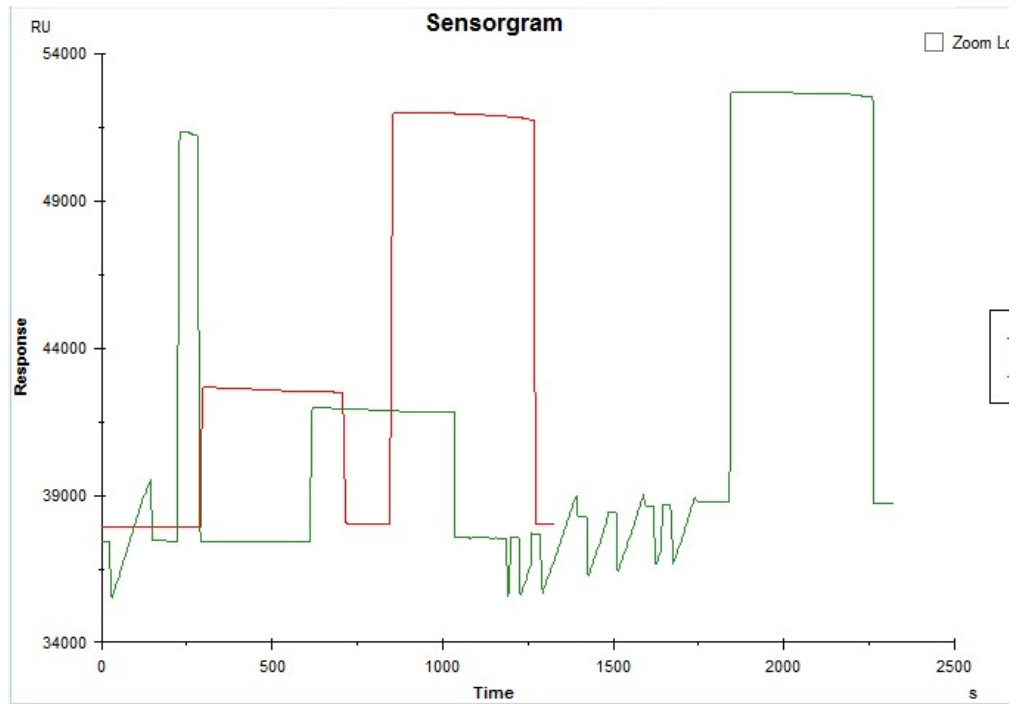
No, the answer is incorrect.

Score: 0

Accepted Answers:

10mM Acetate pH 4.0

8) Based on Figure 2 shown below, which of the following curves depicts blank immobilization? **1 point**



- 1
- 2

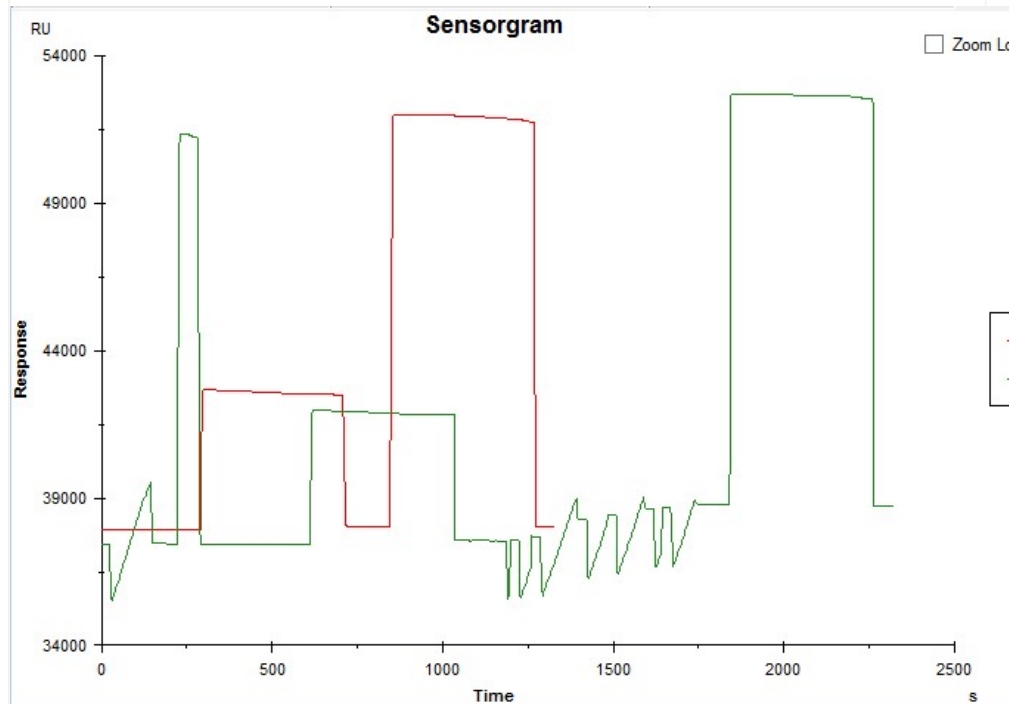
No, the answer is incorrect.

Score: 0

Accepted Answers:

1

9) Based on Figure 2 shown below, which of the following curves depicts immobilization of the ligand? **1 point**



- 1
- 2

No, the answer is incorrect.

Score: 0

Accepted Answers:

2

10) In the formulation of an SPR experiment, one tries to minimize non-specific binding. Which of the following **1 point** will be the best choice?

- Using a low pH running buffer
- By adding salt and/or detergent to the running buffer
- by varying the analyte injection time
- None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

By adding salt and/or detergent to the running buffer

Previous Page

End