Sequence

Order	Sample	[Product] (mM)	[Enzyme] (mg/mL)
1	Buffer	0	-
2	Cal-1	1,5	-
3	Cal-2	1,2	-
4	Cal-3	0,9	-
5	Cal-4	0,6	-
6	Cal-5	0,3	-
7	Buffer	0	-
8	**Enzyme 1**	To be calculated	0,12
9	Buffer	0	-
10	**Enzyme 2**	To be calculated	0,2
11	Buffer	0	-

Detected peaks

Buffer	Cal-1	Cal-2	Cal-3
1,6012	0,4512	0,8517	1,1097
1,6040	0,4287	0,8151	1,0760
1,6063	0,4411	0,7821	1,0599
1,6011	0,4493	0,8157	1,0732
1,5987	0,4566	0,7959	1,0846
1,6203	0,4503	0,7834	1,1003
1,6059	0,4472	0,7826	1,1002
1,6504	0,4413	0,7839	1,0830
1,6096	0,4356	0,7659	1,0869
1,6154	0,4303	0,7748	1,0754

Average Product (mM)

Activity (µmol·s-1·mg-1)

Parameters		Visualized data
Reaction time	4 min	

Cal-4	Cal-5	Buffer	Enzyme 1	Buffer	Enzyme 2	Buffer
1,3497	1,5202	1,6581	1,0675	1,5084	0,7857	1,4512
1,2778	1,4962	1,6310	1,0096	1,5539	0,7707	1,5199
1,3116	1,4665	1,6435	0,9797	1,5499	0,7426	1,5520
1,2890	1,4579	1,6354	0,9770	1,5935	0,7532	1,5669
1,2337	1,4831	1,5797	0,9738	1,6050	0,8608	1,5978
1,3331	1,4690	1,6503	0,9648	1,6444	0,7062	1,6033
1,3396	1,4789	1,5723	0,9662	1,6214	0,7087	1,5885
1,3509	1,4785	1,5921	0,9642	1,6222	0,7171	1,6017
1,3090	1,4653	1,6599	0,9574	1,6501	0,7142	1,6049
1,3268	1,4587	1,6448	0,9364	1,6198	0,7086	1,6223

Procedure

1. Calculate the ave

Note: C*alculate the*
was one sample.

2. Construct the cal
dependence of sign
concentration) with
regression curve.

Note: *Include also t*
concentration.

3. Determine [P] de
Enzyme 2.

4.Based on this infc
specific activities ac
formula:

?= [?]/(?·[?])

a = specific activity
[P] = product conce
t = reaction time
[E] = enzyme conce

Note: the specific a
in units of [µmol·s-1
which units do you

5. Compare both er

erage of each sample.

average of all buffers as if it

ibration curve (the
al on [P] - product
either linear or quadratic

he buffers with zero product

veloped by Enzyme 1 &

rmation, calculate their
cording to the following

ntration

entration

ctivitity should be expressed
·mg-1], so double-check
input into the fomula.

nzymes.