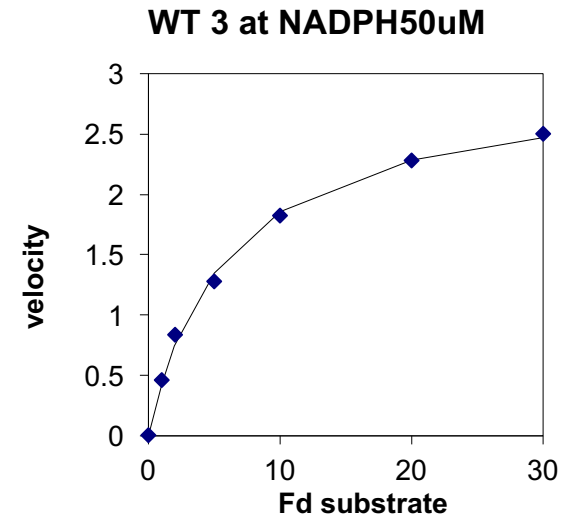
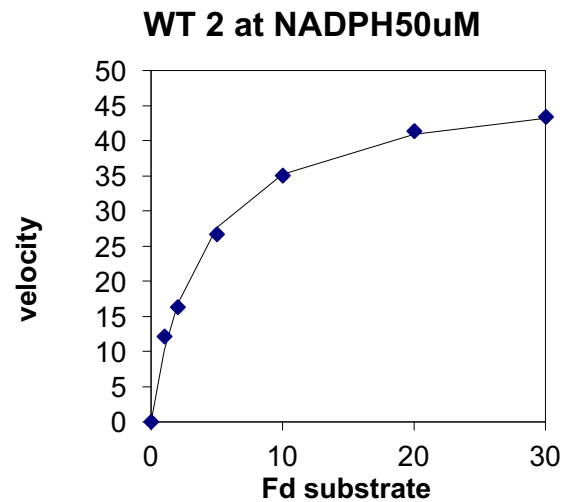
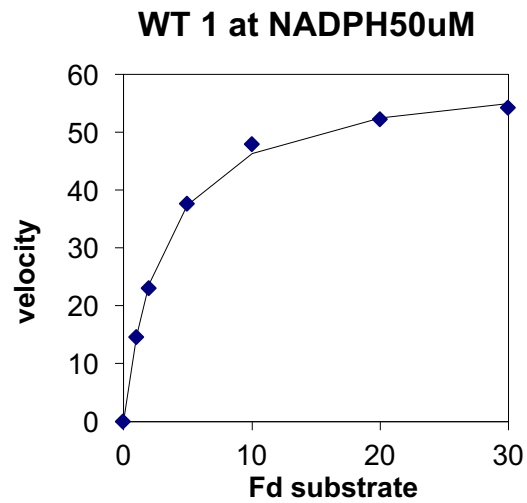
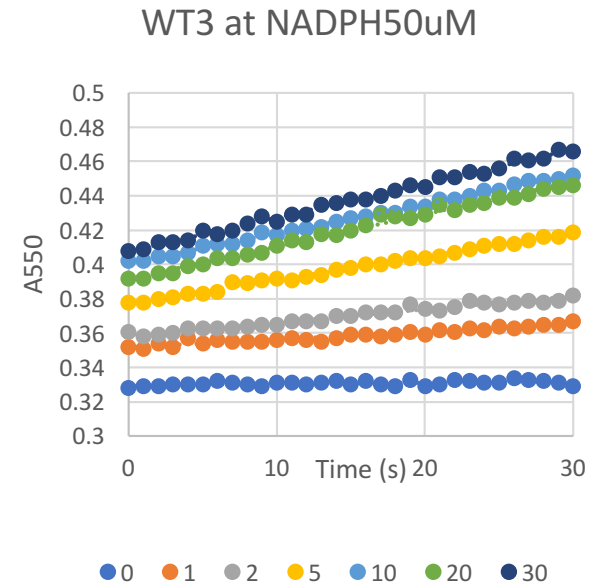
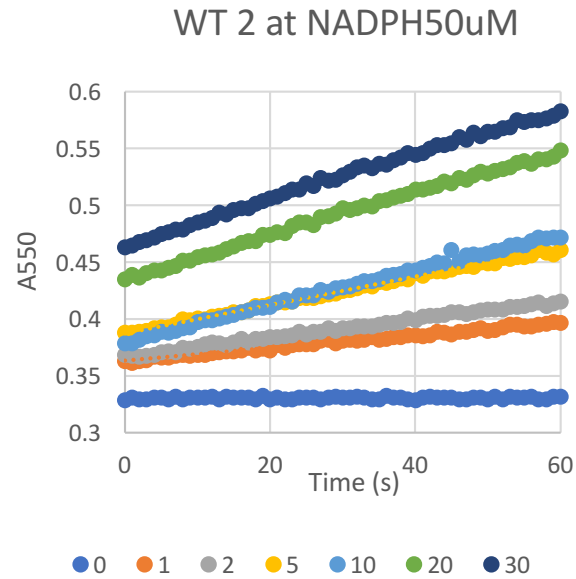
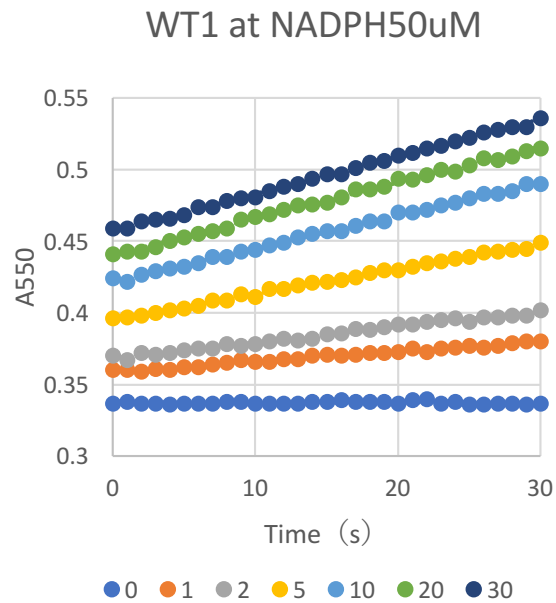


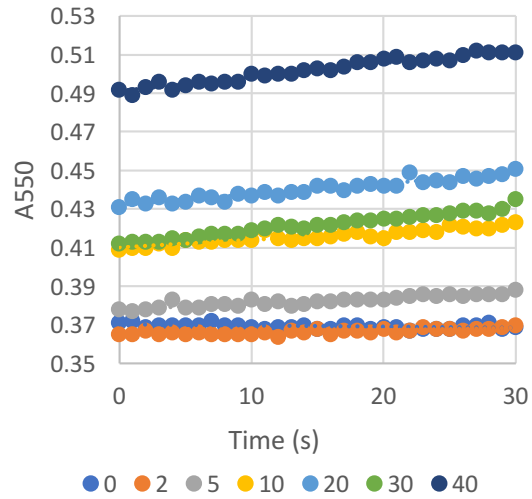
Cyt c reduction assay of wild-type FNR at 50 μ M NADPH
 numbers below X-axis: concentration of LFd (μ M)



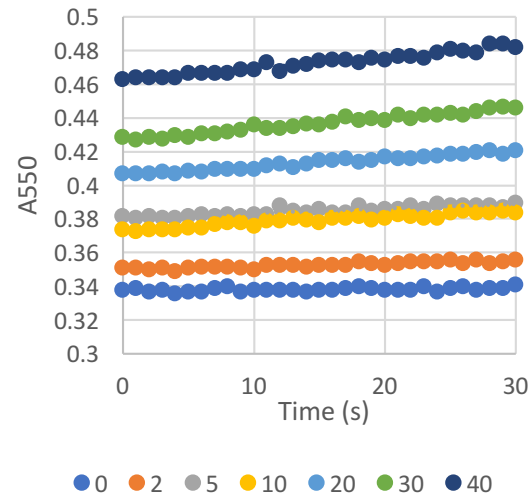
	1	2	3	Average	SD
Km (μ M)=	3.106619487	3.808317081	3.699670092	3.53820222	0.308381564
Vmax (e/s)=	60.64829602	48.68677721	45.44797788	51.59435037	6.537221846

Y314S at 50 μM NADPH

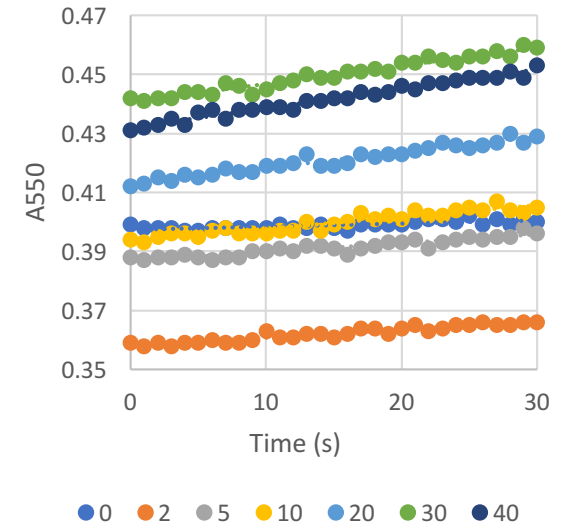
Y314S 1 at NADPH50uM



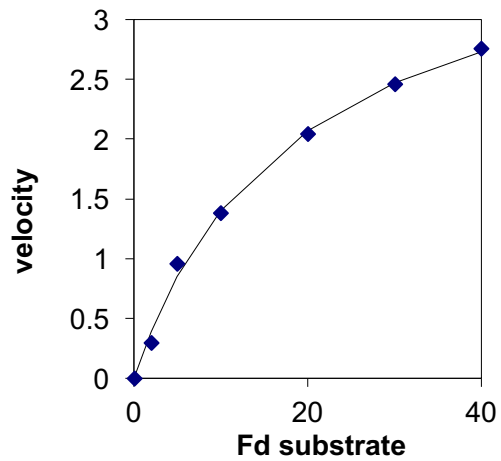
Y314S 2 at NADPH50uM



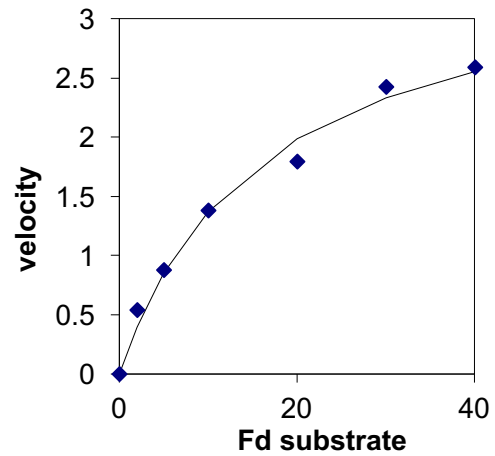
Y314S 3 at NADPH50uM



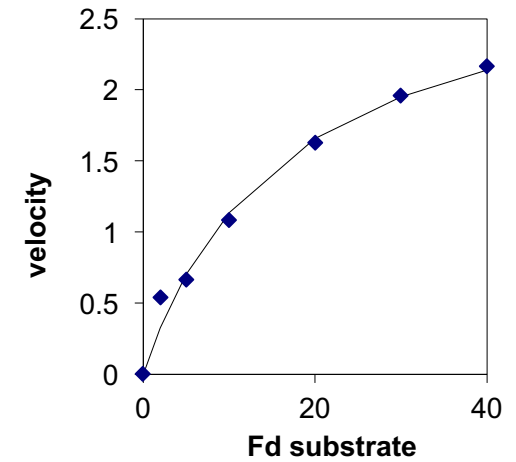
Y314S 1 at NADPH50uM



Y314S 2 at NADPH50uM

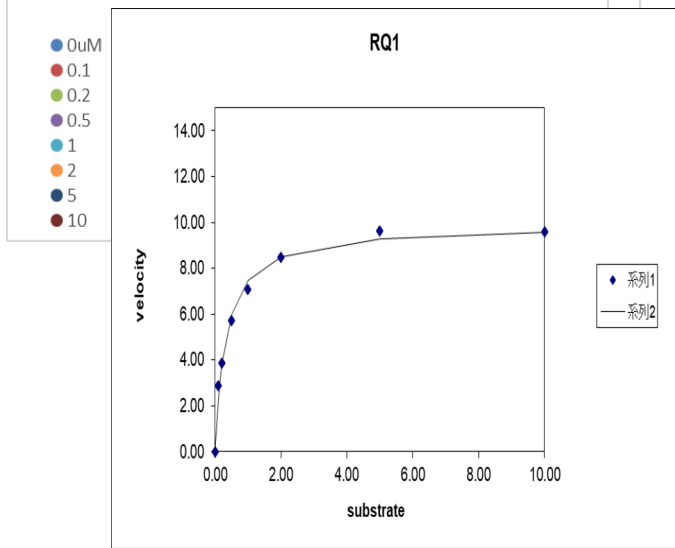
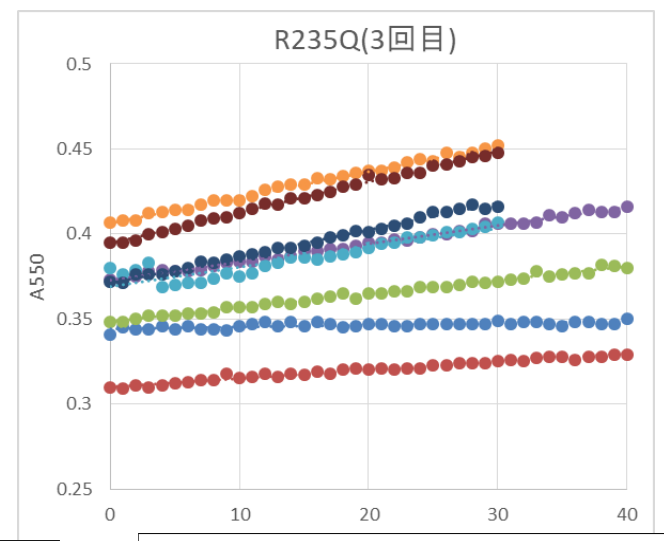
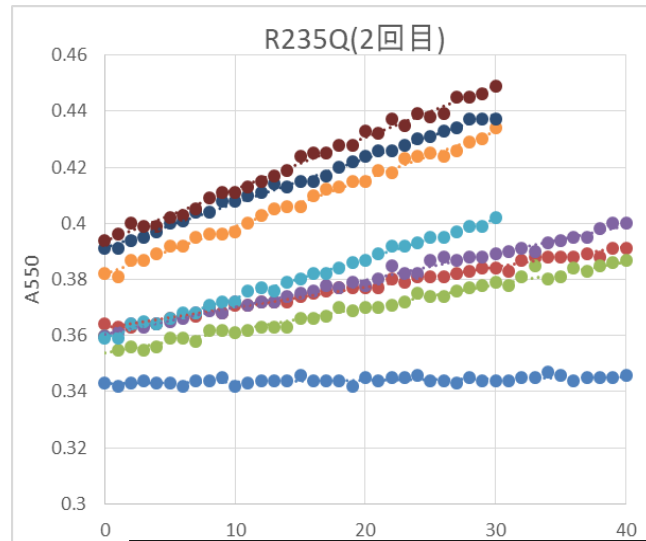
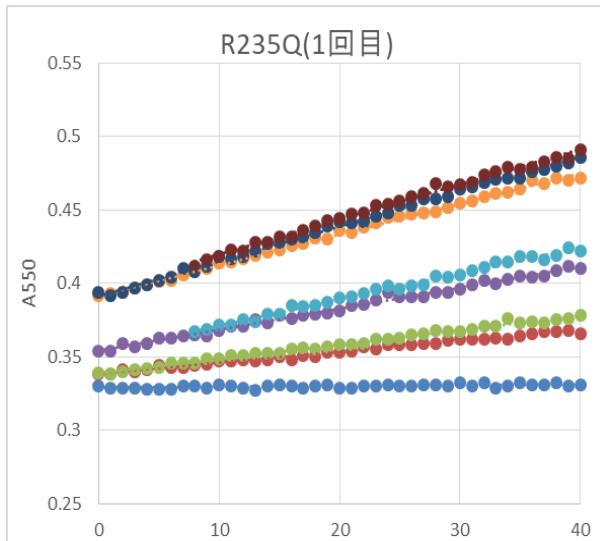


Y314S 3 at NADPH50uM

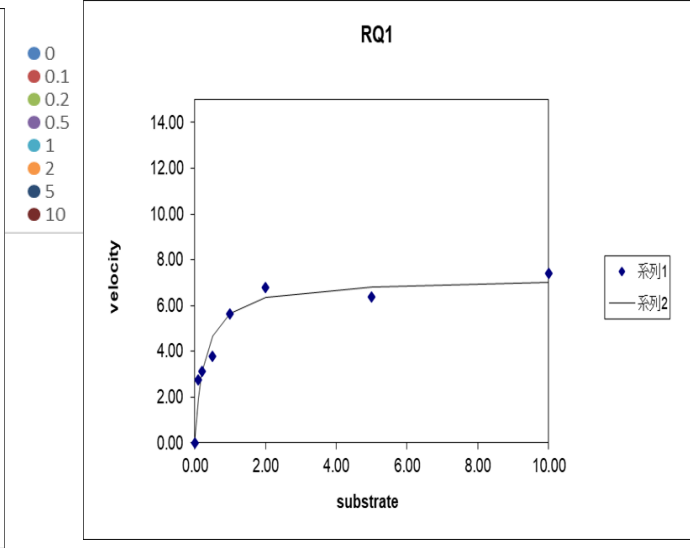


	1	2	3	Average	SD
Km (μM)=	18.57574261	16.05572332	16.4172826	17.01624951	1.112563203
Vmax (e/s)=	3.998349116	3.57623833	3.019211861	3.531266435	0.40099401

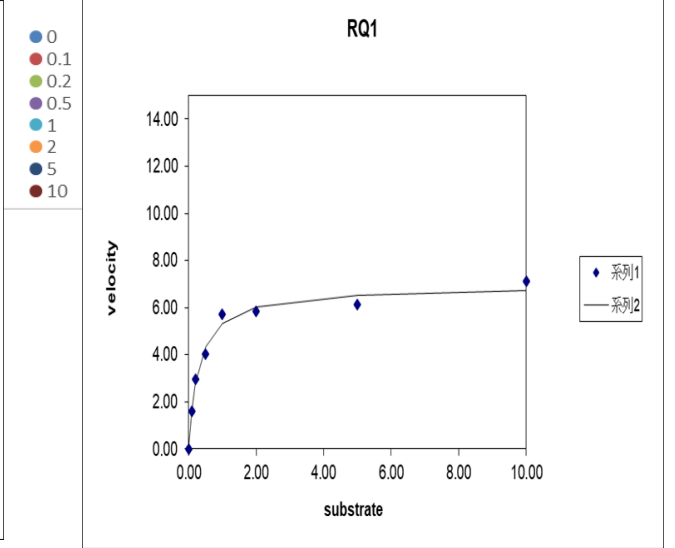
R235Q at 50 μ M NADPH



Km	Vmax
0.326	9.903



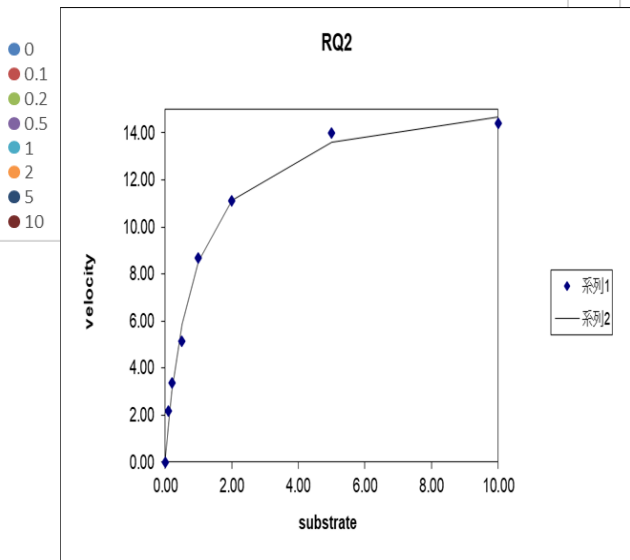
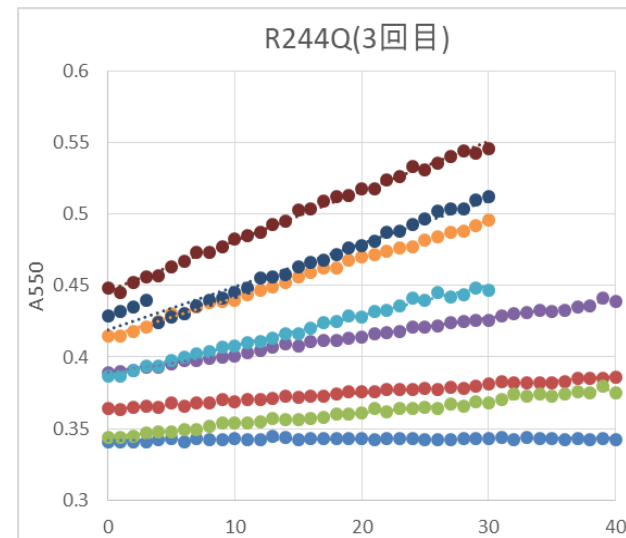
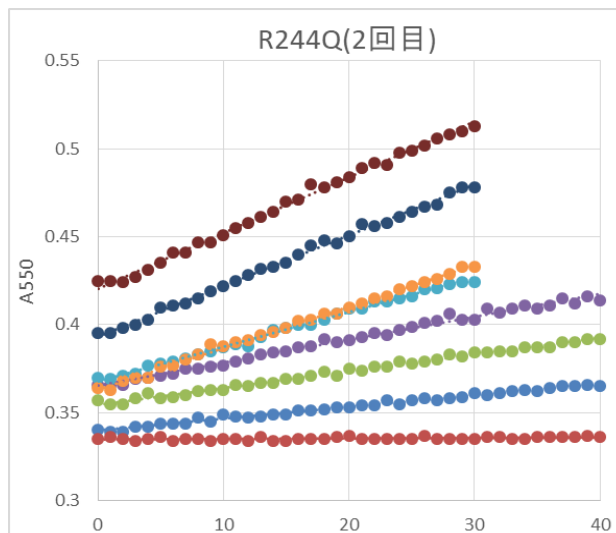
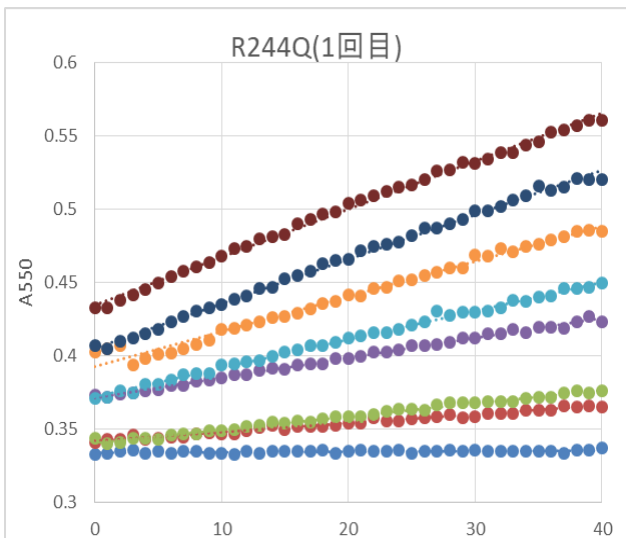
Km	Vmax
0.271	7.201



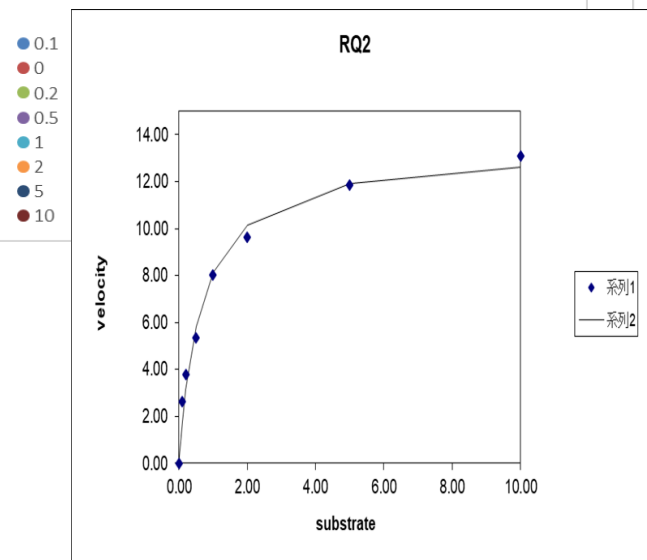
Km	Vmax
0.302	6.937

	Km (μ M)	Vmax (e/s)
R235Q	0.299 \pm 0.0225	8.014 \pm 1.34

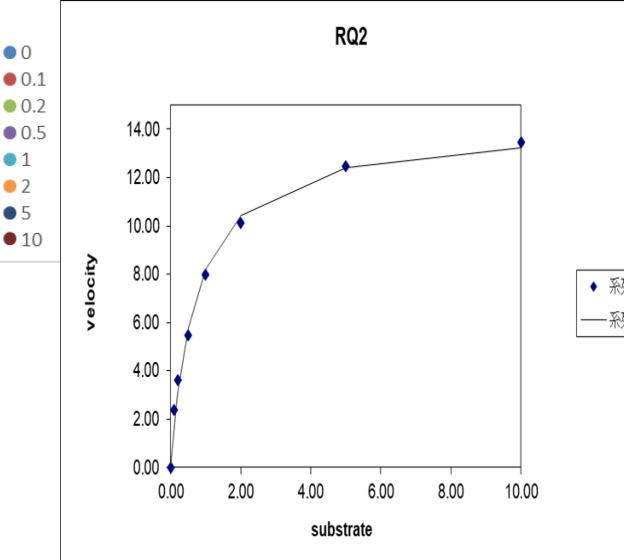
R244Q at 50 μM NADPH



Km	Vmax
0.725	14.198



Km	Vmax
0.656	13.46



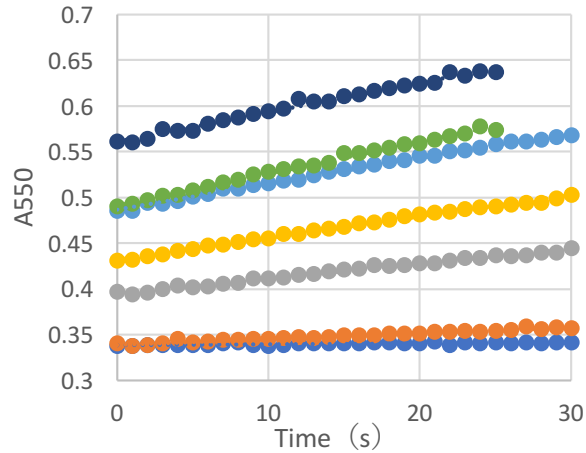
Km	Vmax
0.863	15.94

	Km (μM)	Vmax (e/s)
R244Q	0.748 ± 0.086	14.53 ± 1.039

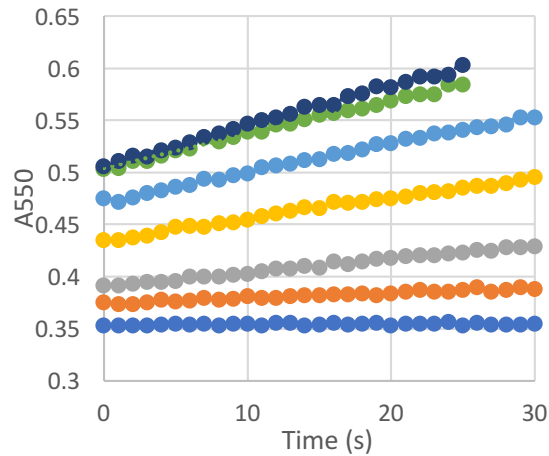
Cyt c reduction assay of wild-type FNR at 250 μM NADPH

numbers below X-axis: concentration of LFd (μM)

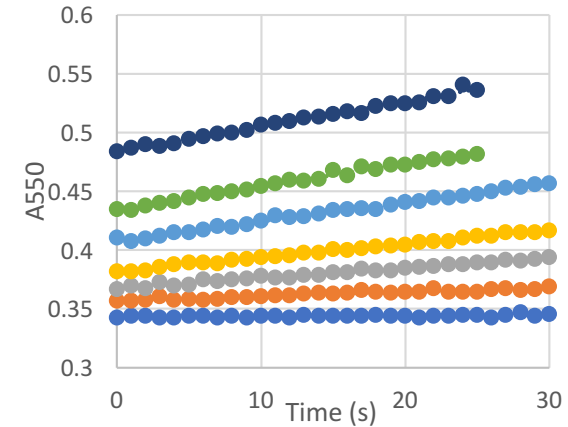
WT1 at NADPH250uM



WT2 at NADPH250uM

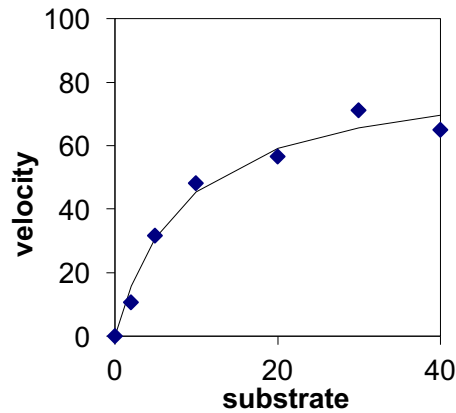


WT3 at NADPH250uM

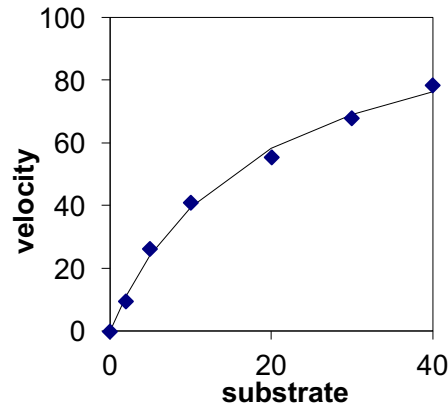


- 0
- 2
- 5
- 10
- 20
- 30
- 40

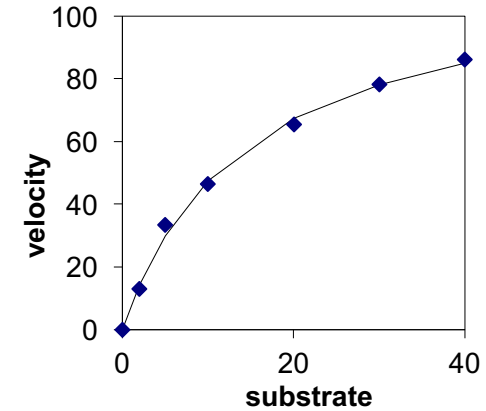
WT1 at NADPH250uM



WT2 at NADPH250uM



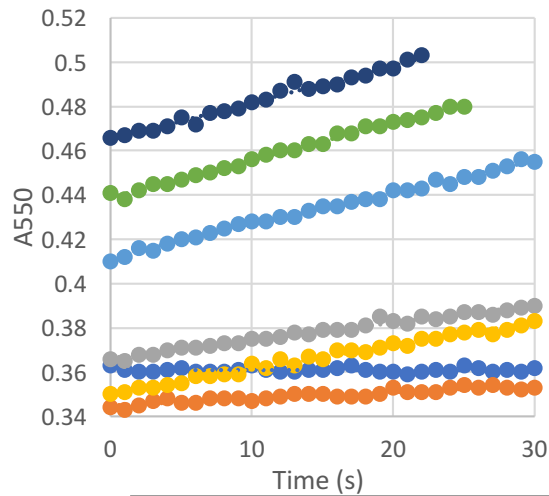
WT3 at NADPH250uM



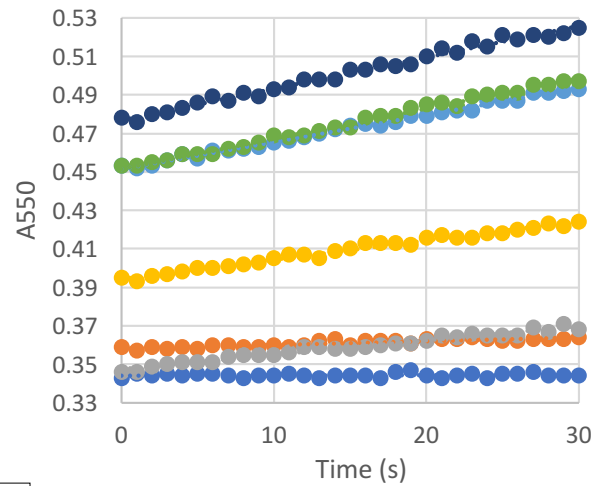
	1	2	3	4	5	6	Average	SD
Km (μM)=	8.689491789	17.93305898	14.22841464	9.493798154	11.22676394	10.17721815	11.95812428	3.19680672
Vmax (e/s)=	84.69469387	110.5180254	115.255227	89.03628878	88.56470355	94.82963176	97.14976172	11.59426389

cont. wild-type FNR at 250 μM NADPH

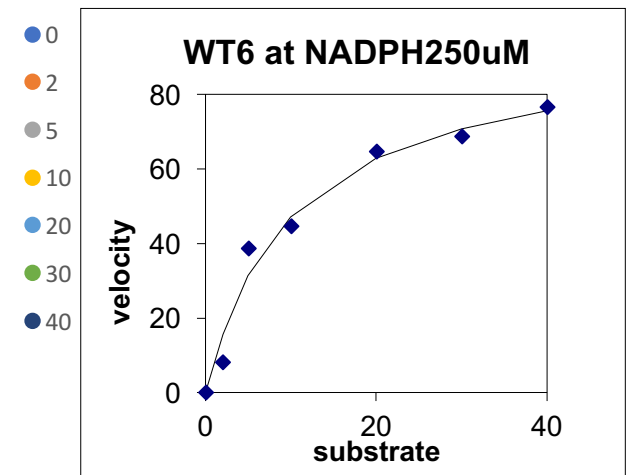
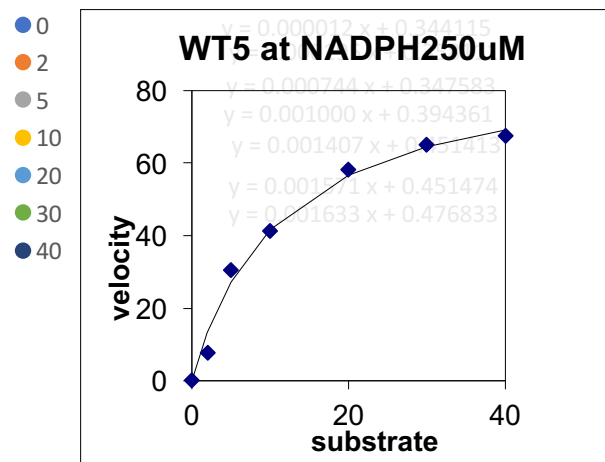
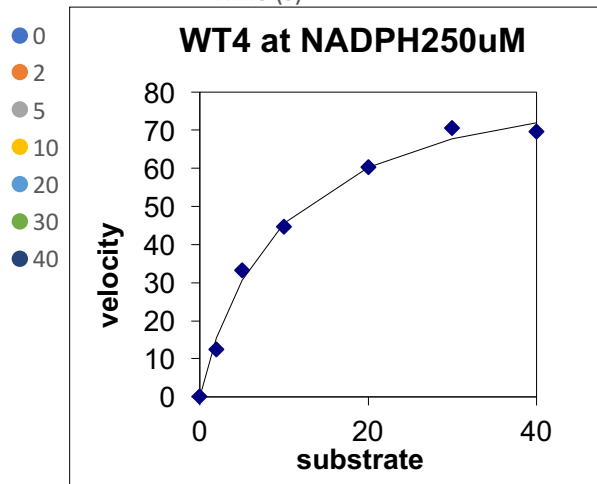
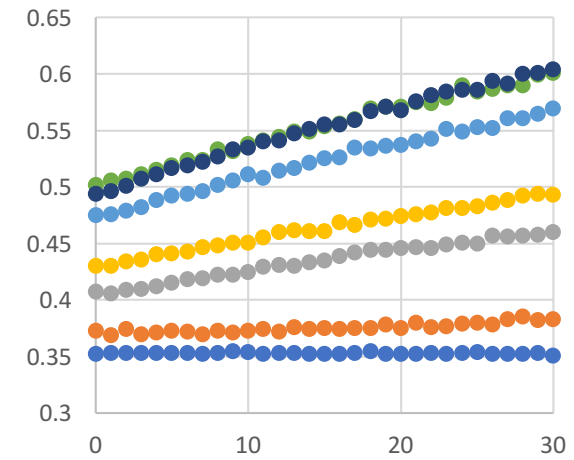
WT4 at NADPH250uM



WT5 at NADPH250uM



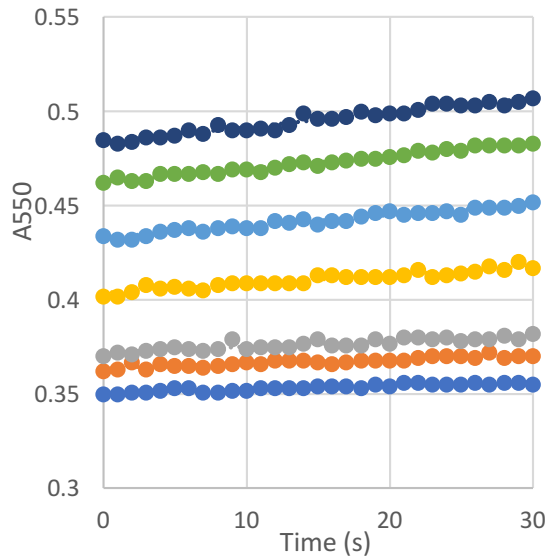
WT6 at 250 μM NADPH



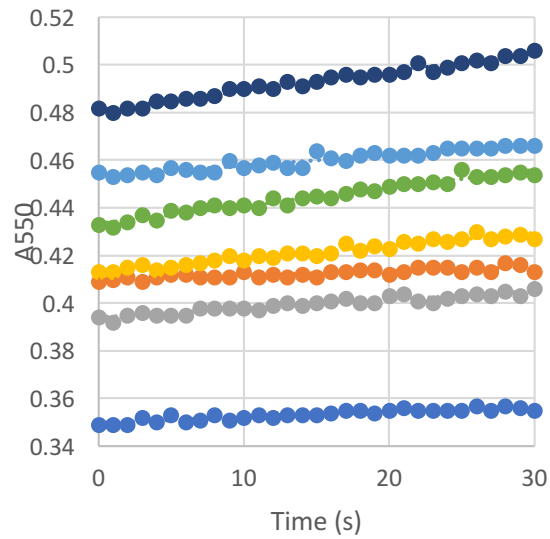
	1	2	3	4	5	6	Average	SD
Km (μM)=	8.689491789	17.93305898	14.22841464	9.493798154	11.22676394	10.17721815	11.95812428	3.19680672
Vmax (e/s)=	84.69469387	110.5180254	115.255227	89.03628878	88.56470355	94.82963176	97.14976172	11.59426389

Y314S at 250 μ M NADPH

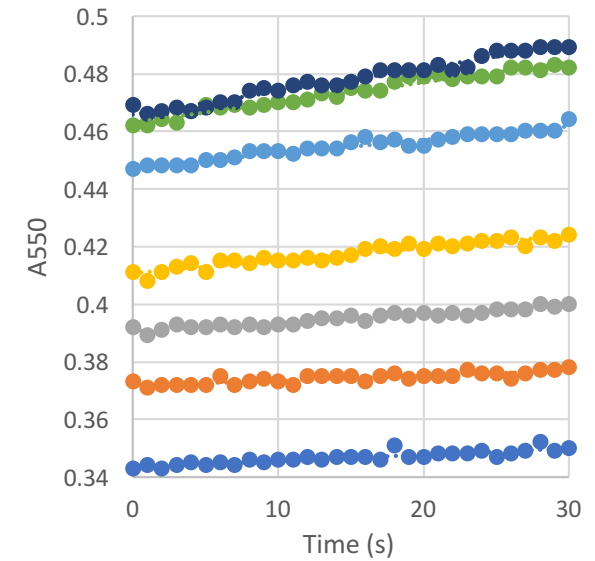
Y314S 1 at NADPH250 μ M



Y314S 2 at NADPH250 μ M

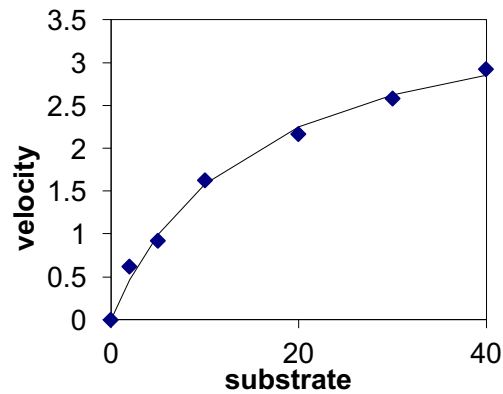


Y314S 3 at NADPH250 μ M



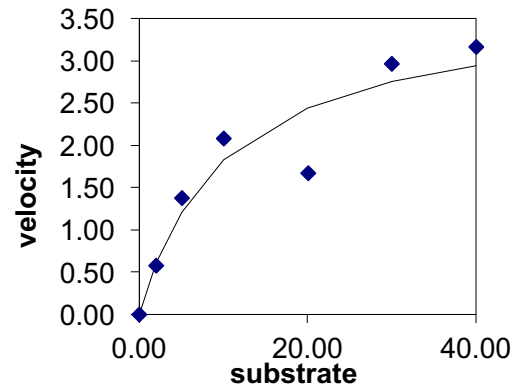
- 0
- 2
- 5
- 10
- 20
- 30
- 40

Y314S 1 at NADPH250 μ M



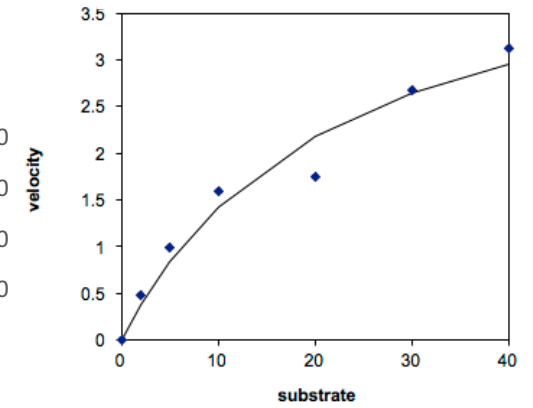
- 0
- 2
- 5
- 10
- 20
- 30
- 40

Y314S 2 at NADPH250 μ M



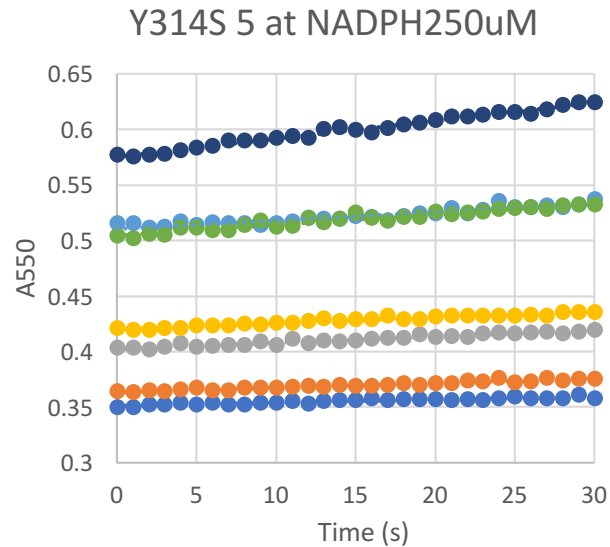
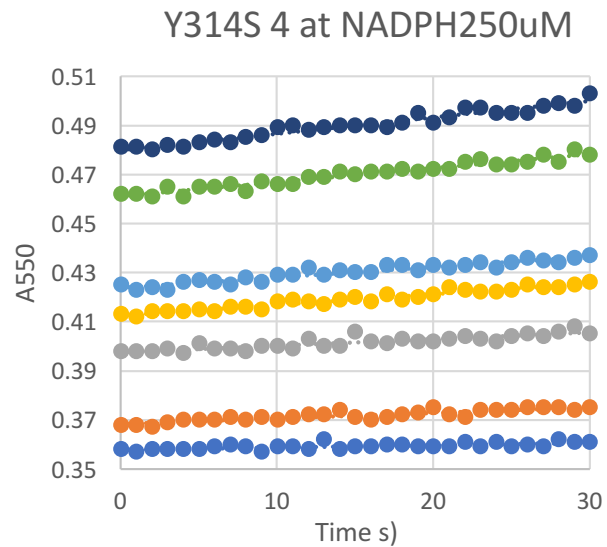
- 0
- 2
- 5
- 10
- 20
- 30
- 40

Y314S 3 at NADPH250 μ M



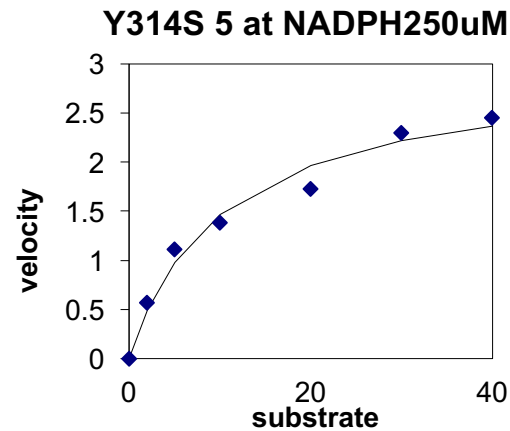
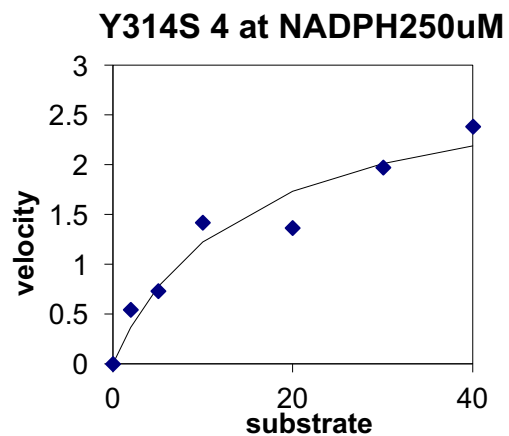
	1	2	3	4	5	Average	SD
Km (μ M)=	14.62476831	9.402317583	17.56002178	14.13793672	10.16145187	13.17729925	3.019008771
Vmax (e/s)=	3.893403135	3.919003592	4.383900253	2.96273729	2.968351895	3.625479233	0.566424829

cont. Y314S at 250 μ M NADPH



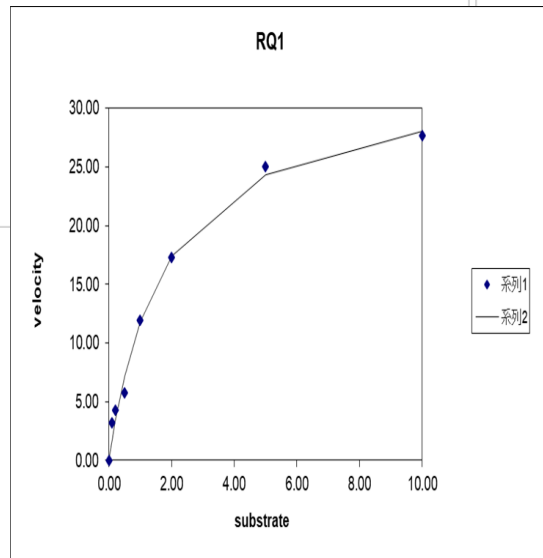
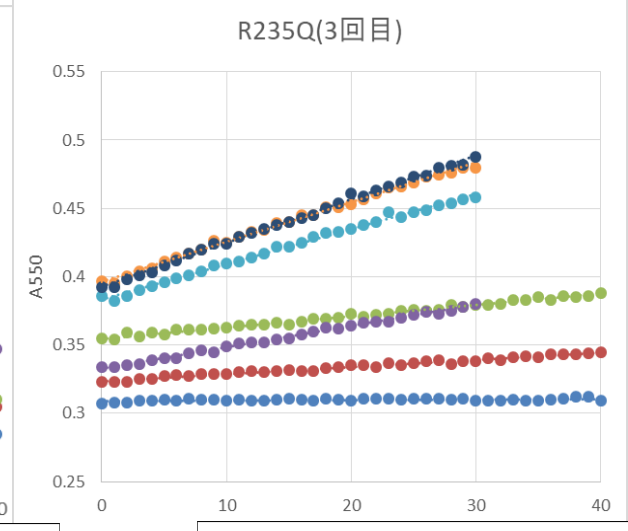
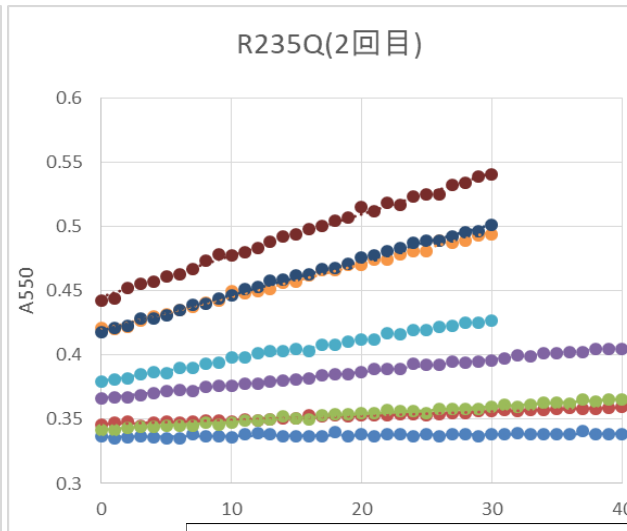
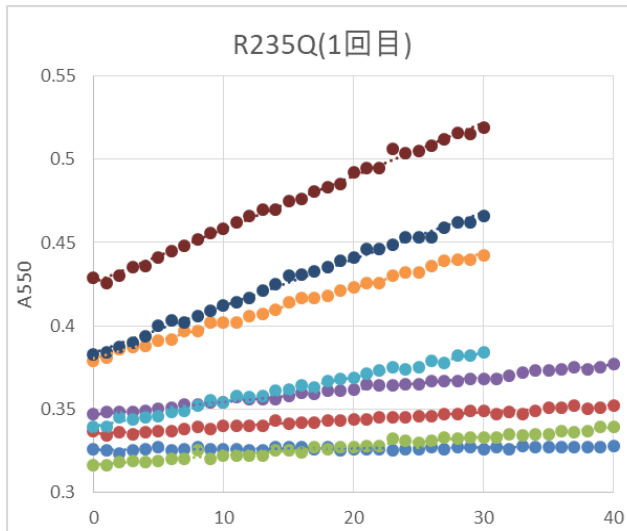
- 0
- 2
- 5
- 10
- 20
- 30
- 40

- 0
- 2
- 5
- 10
- 20
- 30
- 40

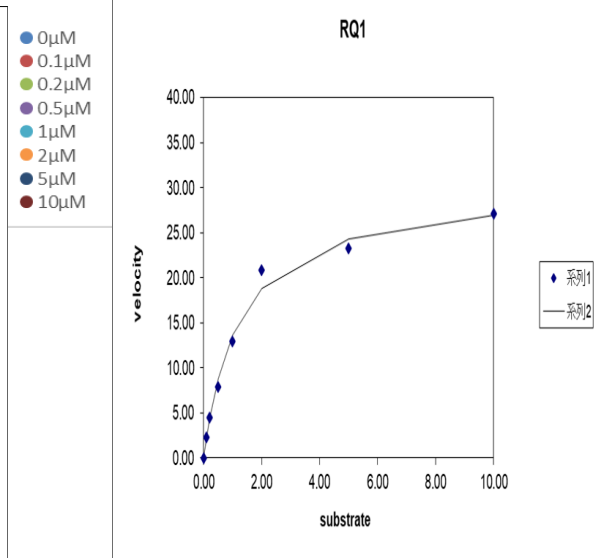


	1	2	3	4	5	Average	SD
Km (μ M)=	14.62476831	9.402317583	17.56002178	14.13793672	10.16145187	13.17729925	3.019008771
Vmax (e/s)=	3.893403135	3.919003592	4.383900253	2.96273729	2.968351895	3.625479233	0.566424829

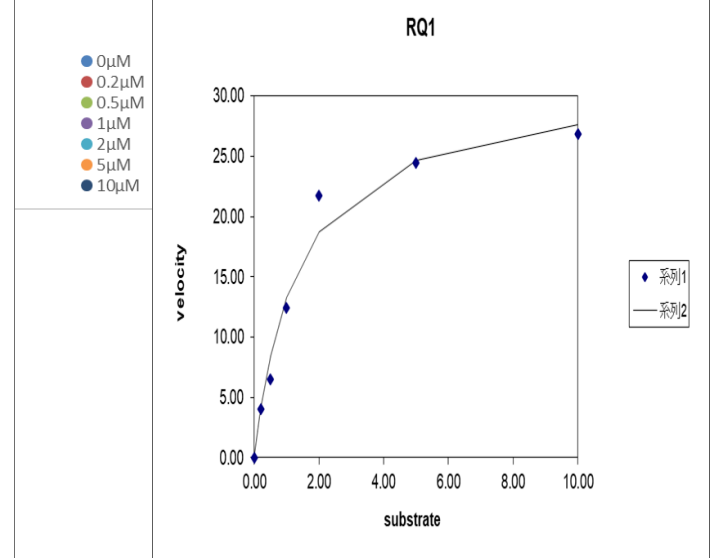
R235Q at 250 μM NADPH



Km 1.8055 Vmax 33.1264



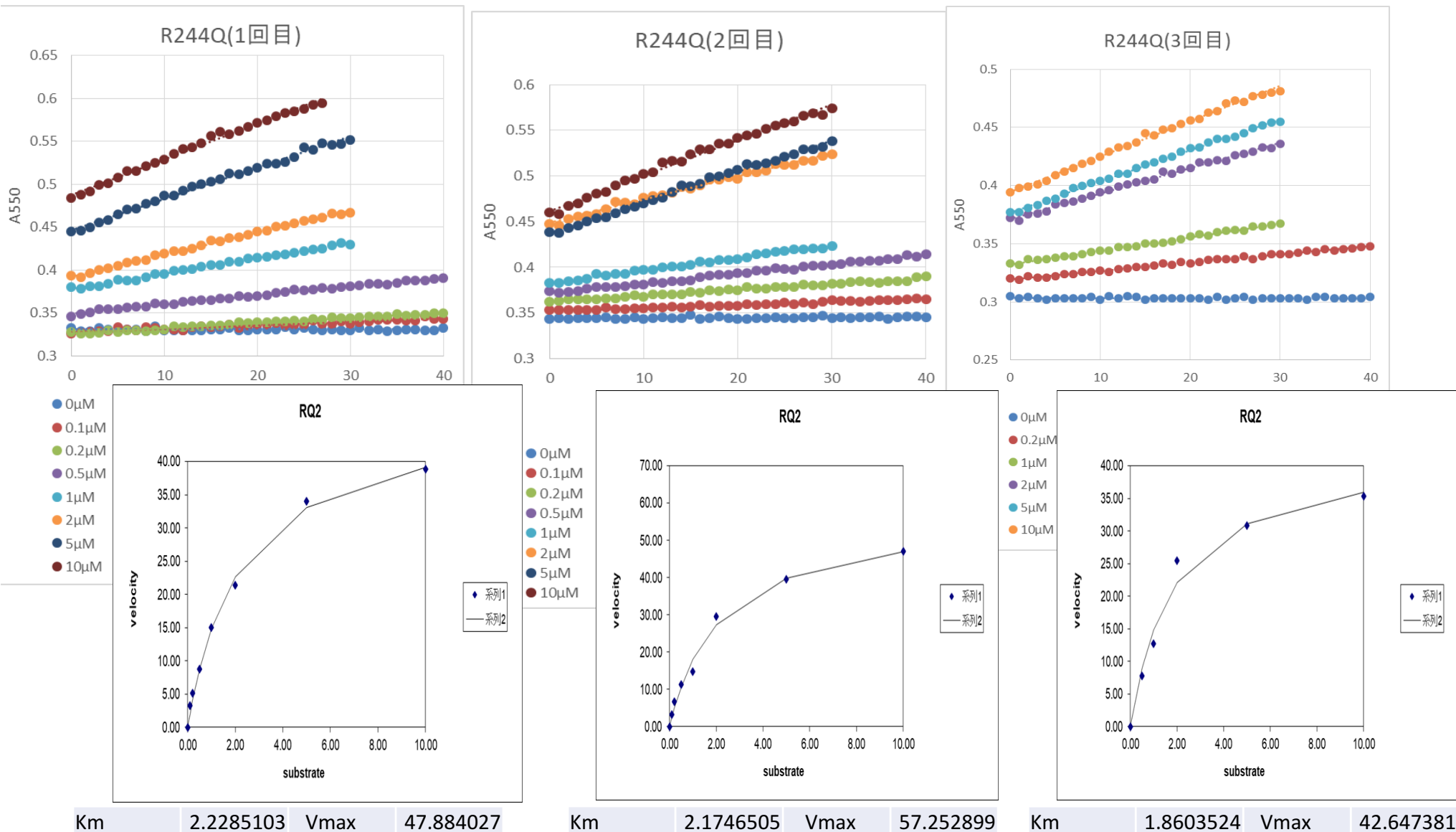
Km 1.226472 Vmax 30.29722



Km 1.359240 Vmax 31.413

	Km (μM)	Vmax (e/s)
R235Q	1.464±0.25	31.61±1.16

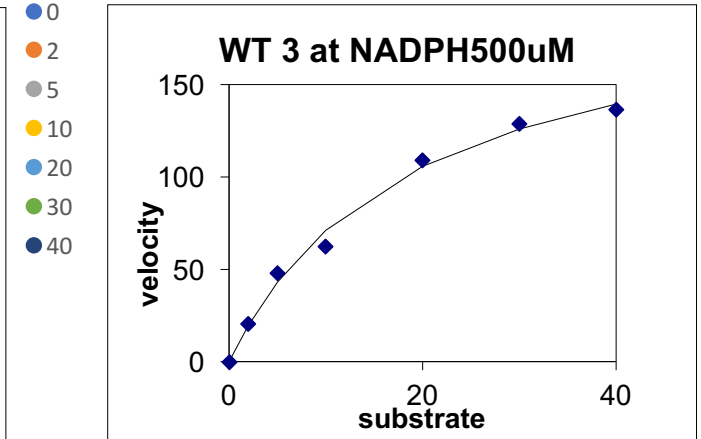
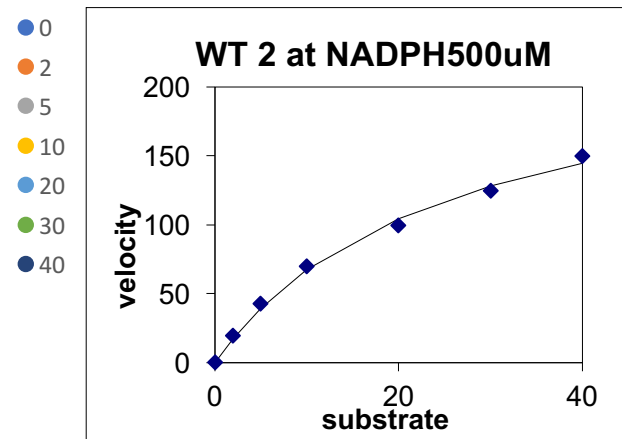
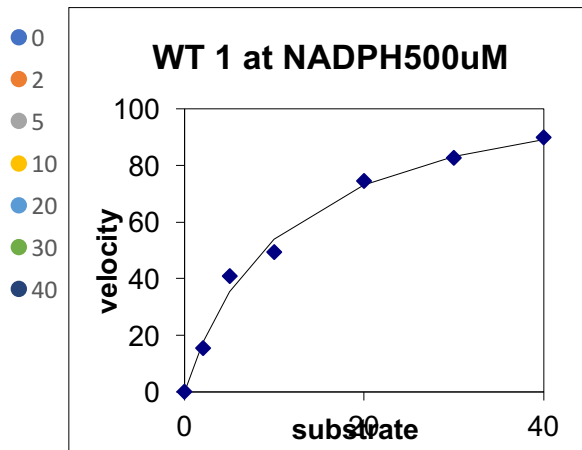
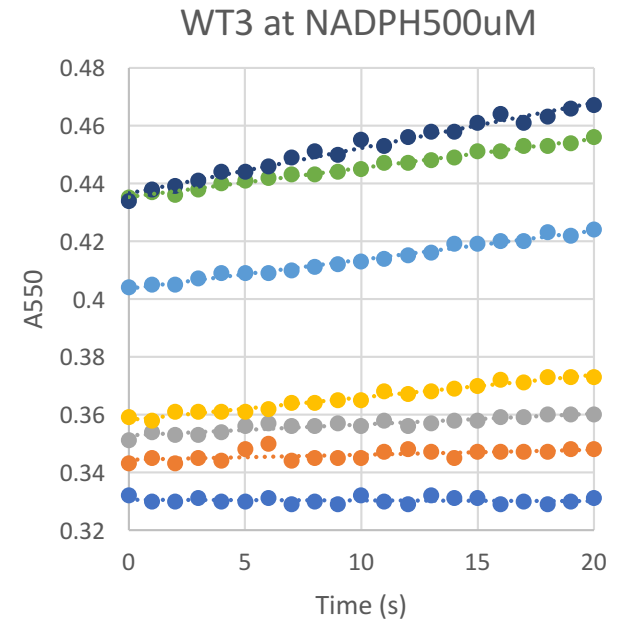
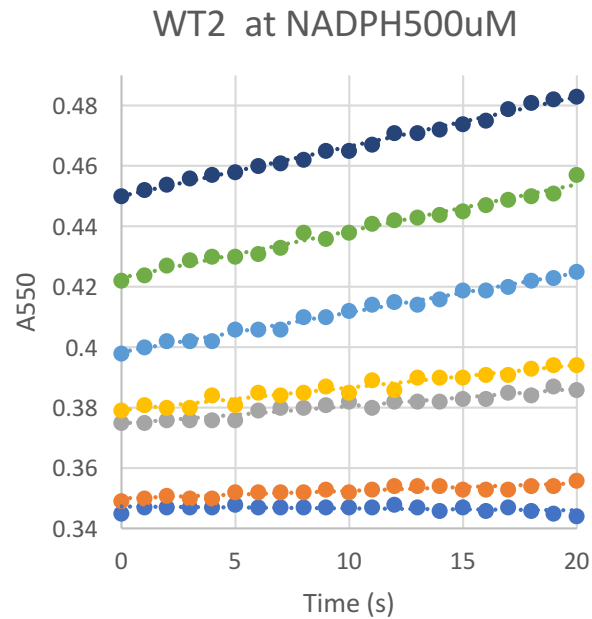
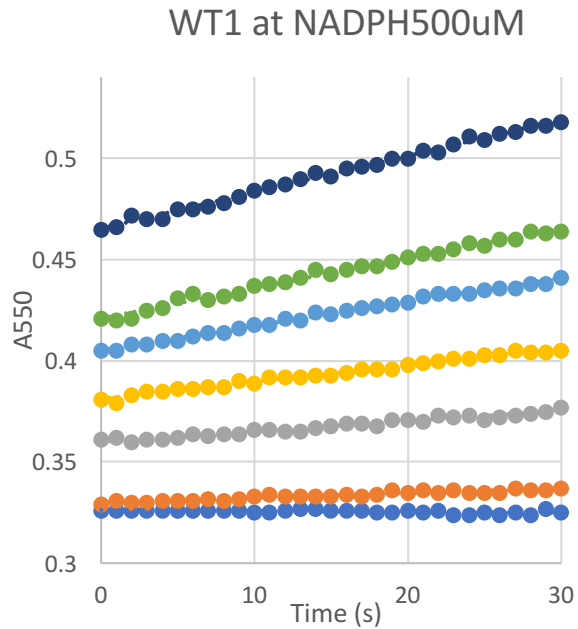
R244Q at 250 μM NADPH



	Km (μM)	Vmax (e/s)
R244Q	2.089±0.16	49.26±6.04

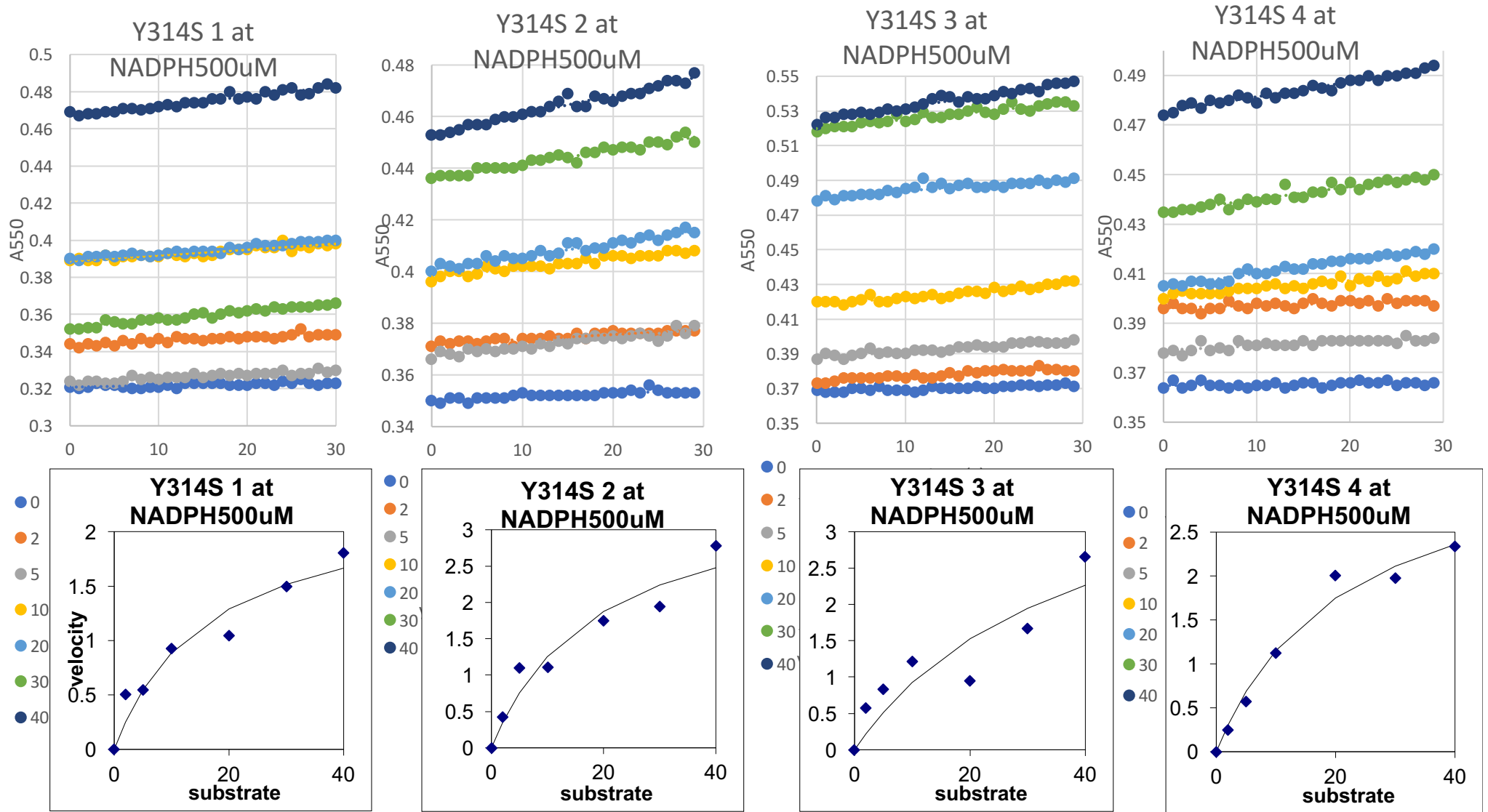
Cyt c reduction assay of wild-type FNR at 500 μM NADPH

numbers below X-axis: concentration of LFd (μM)



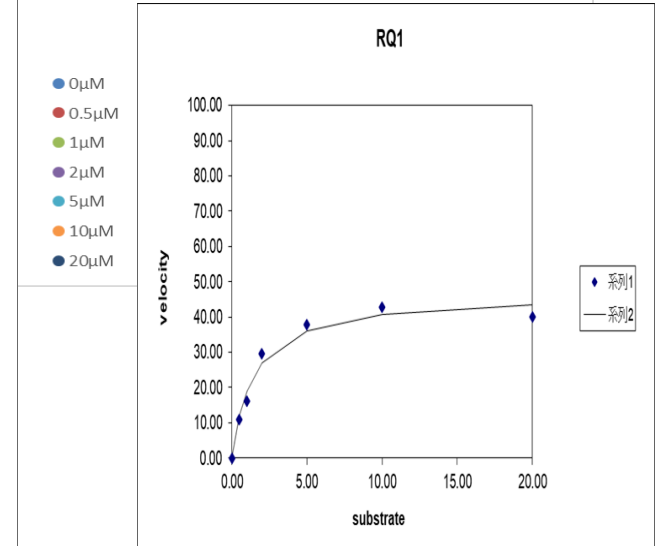
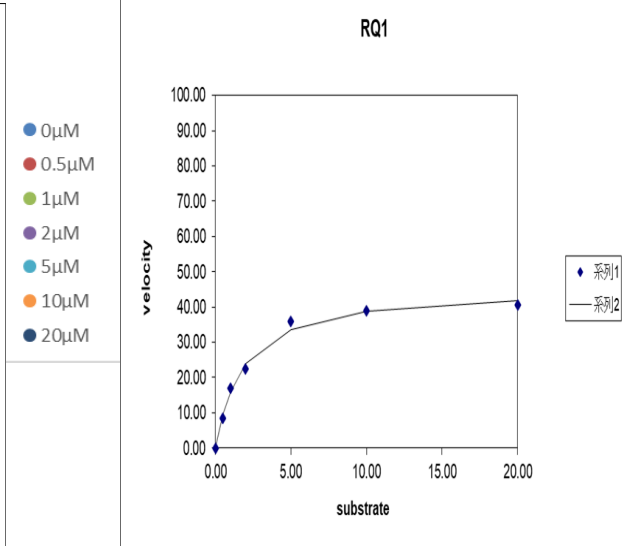
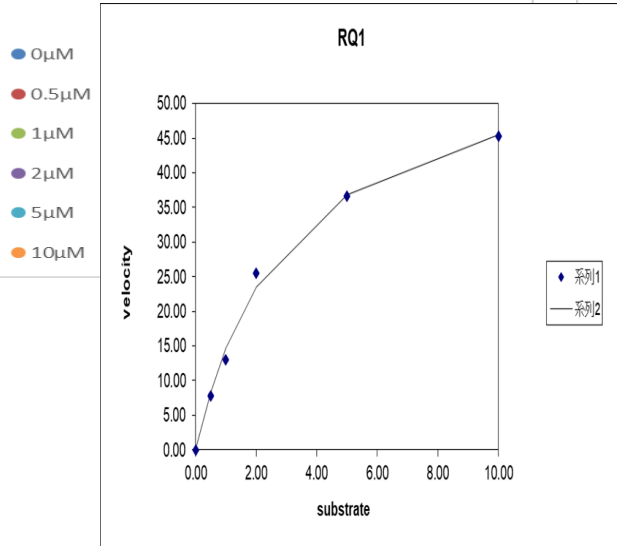
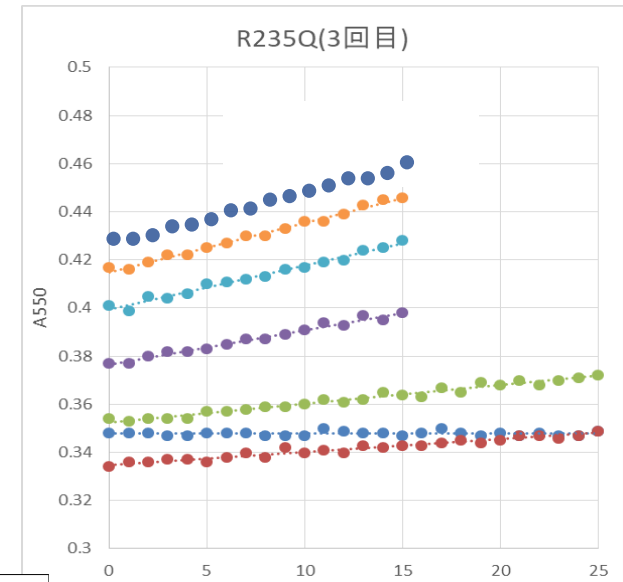
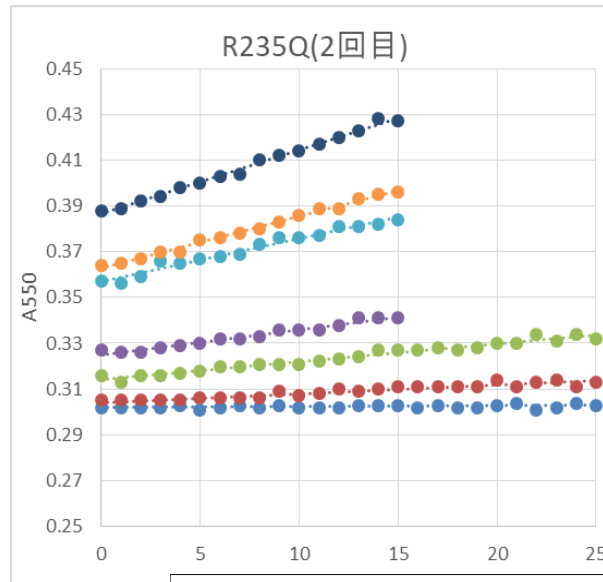
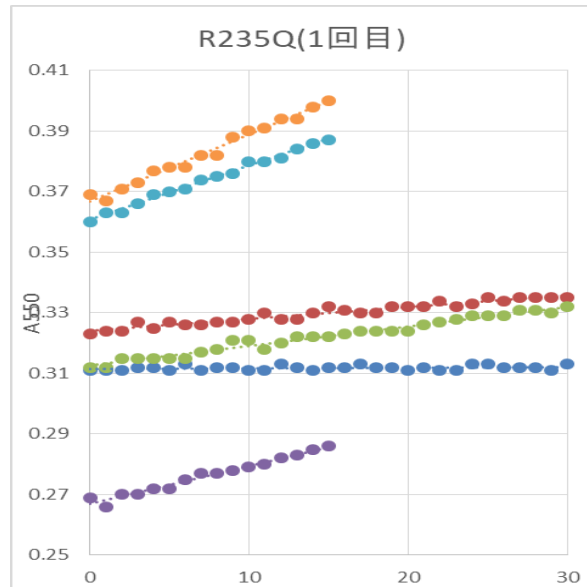
	1	2	3	Average	SD
Km (μM)=	24.74936223	18.9303608	23.3389757	22.33956624	2.478481906
Vmax (e/s)=	234.1982587	205.4605673	184.2837461	207.9808574	20.45529335

Y314S at 500 μ M NADPH



	1	2	3	4	Average	SD
Km (μ M)=	16.62000622	19.13092072	15.60011307	21.27594863	18.15674716	2.2122603
Vmax (e/s)=	2.356690519	3.661335393	3.199938088	3.615057468	3.208255367	0.52345041

R235Q at 500 μM NADPH



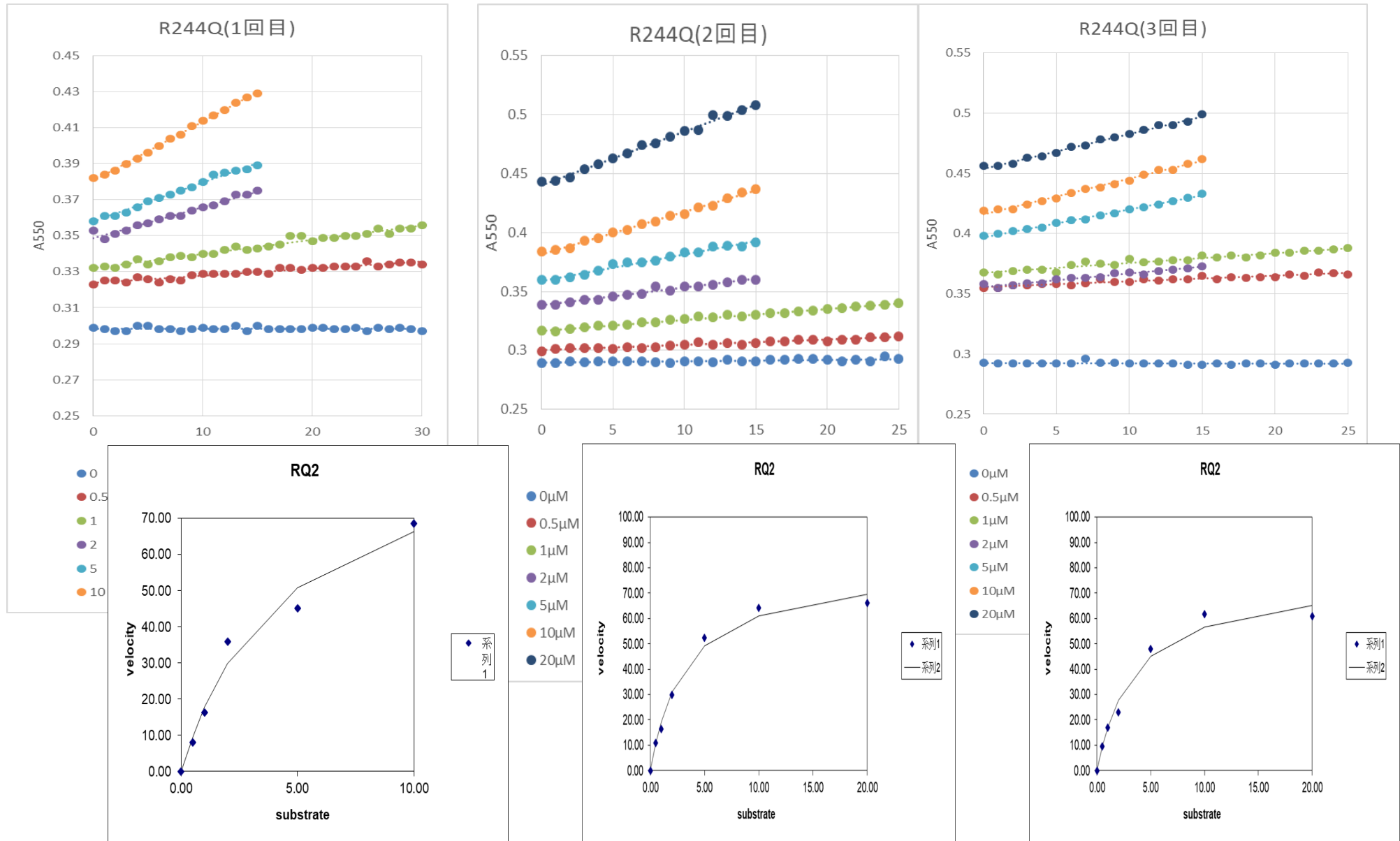
Km 3.045665 Vmax 59.35955

Km 1.838884 Vmax 45.81550

Km 1.430247 Vmax 46.47942

	Km (μM)	Vmax (e/s)
R235Q	2.105±0.69	50.55±6.23

R244Q at 500 μM NADPH



Km 4.400386 Vmax 95.640009

Km 3.14612 Vmax 80.3987

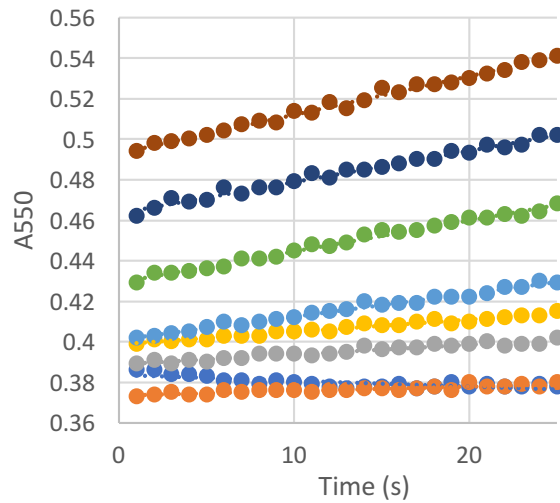
Km 3.4824 Vmax 76.4968

	Km (μM)	Vmax (e/s)
R244Q	3.676±0.53	84.18±8.26

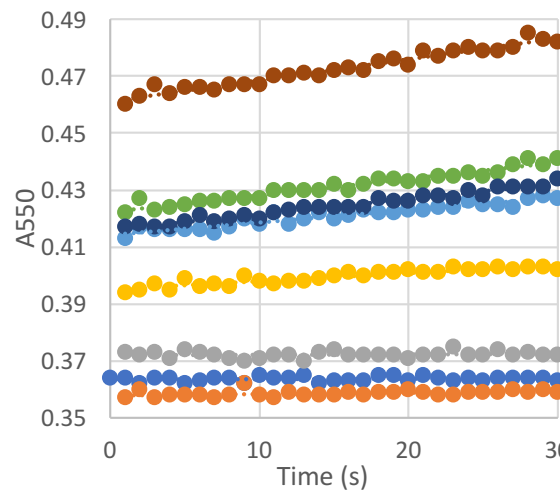
Cyt c reduction assay of wild-type FNR at 1 mM NADPH

numbers below X-axis: concentration of LFd (μM)

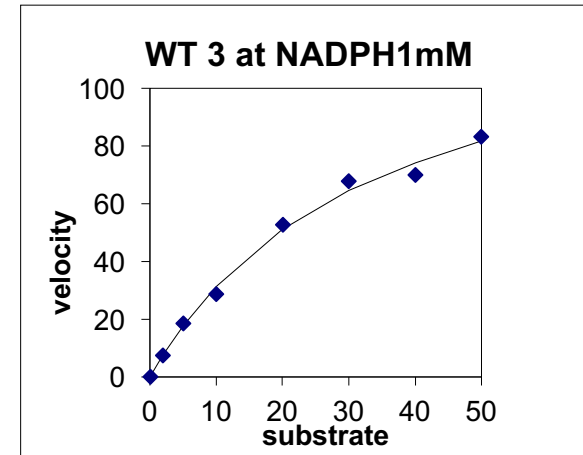
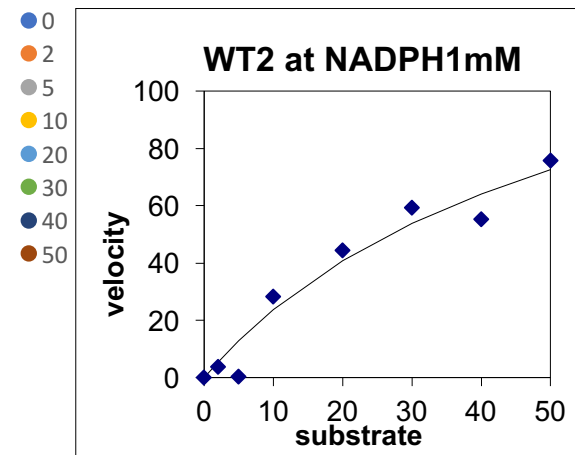
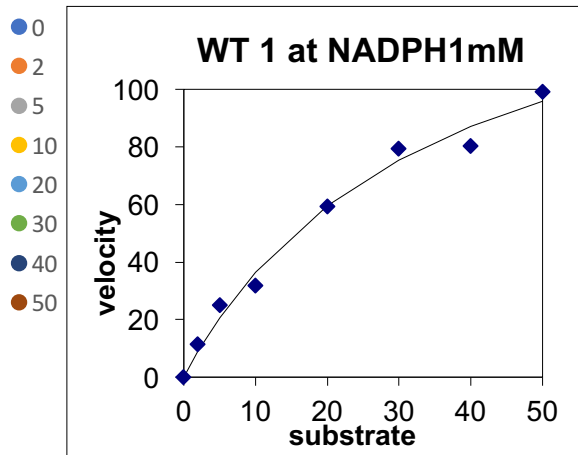
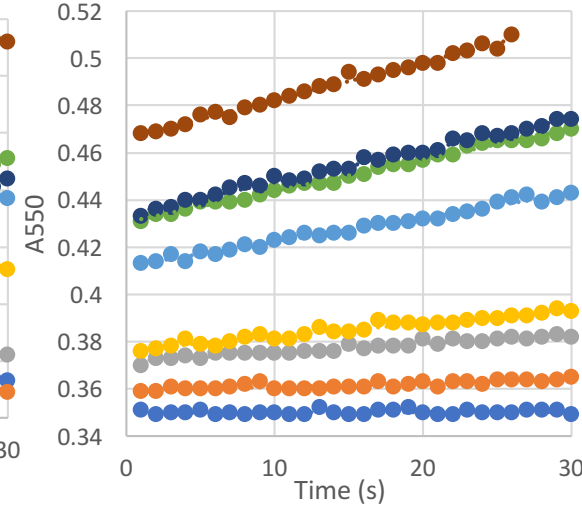
WT1 at NADPH1mM



WT2 at NADPH1mM

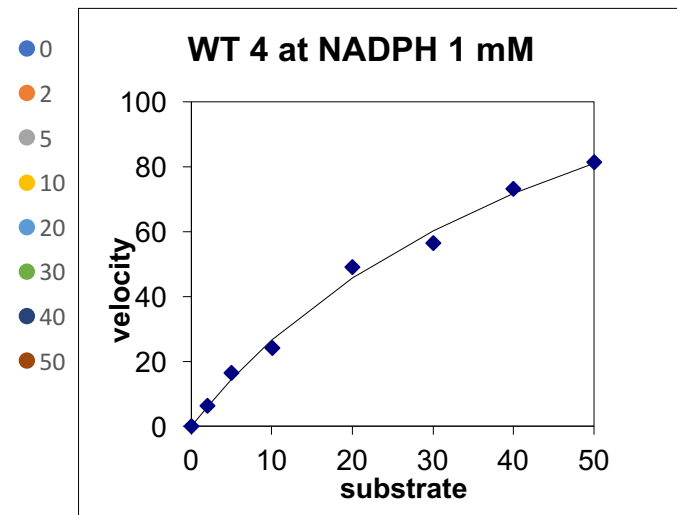
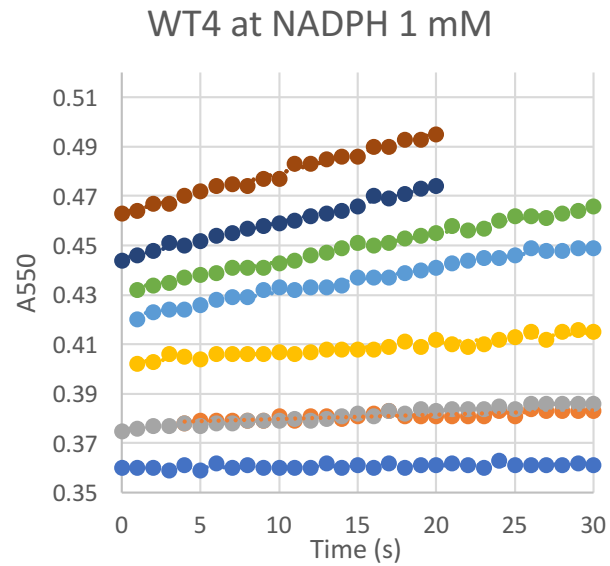


WT3 at NADPH1mM



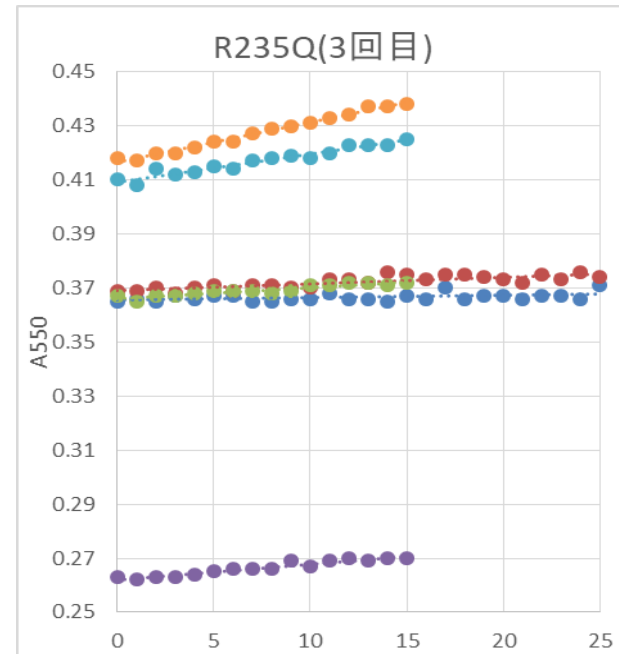
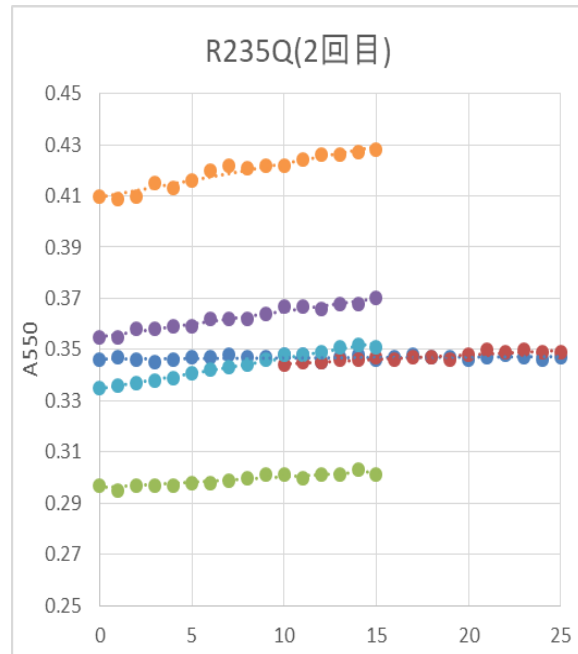
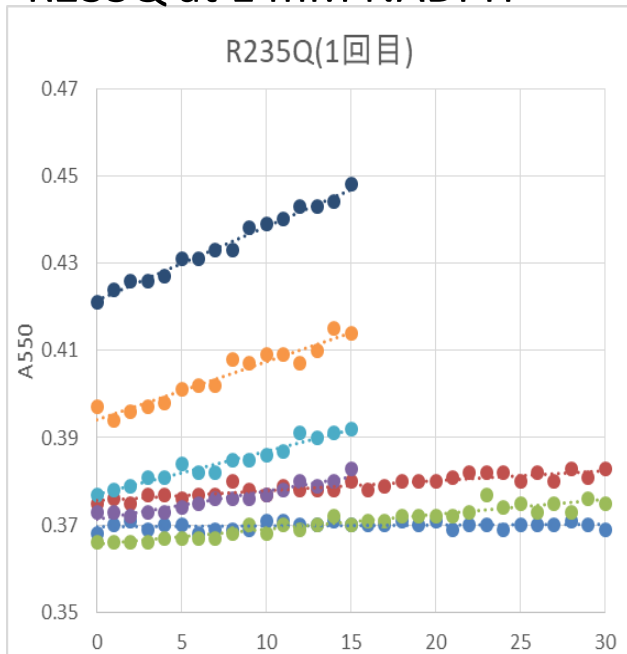
	1	2	3	4	Average	SD
Km (μM)=	34.27829	53.8883	33.434979	53.0924	43.673509	9.825431
Vmax (e/s)=	161.5780	150.7595	136.44268	167.0709	153.9628	11.6943

cont. wild-type FNR at 1 mM NADPH

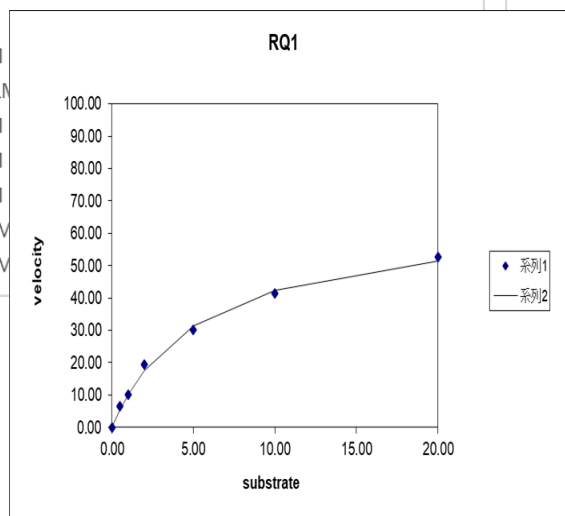


	1	2	3	4	Average	SD
Km (μ M)=	34.27829	53.8883	33.434979	53.0924	43.673509	9.825431
Vmax (e/s)=	161.5780	150.7595	136.44268	167.0709	153.9628	11.6943

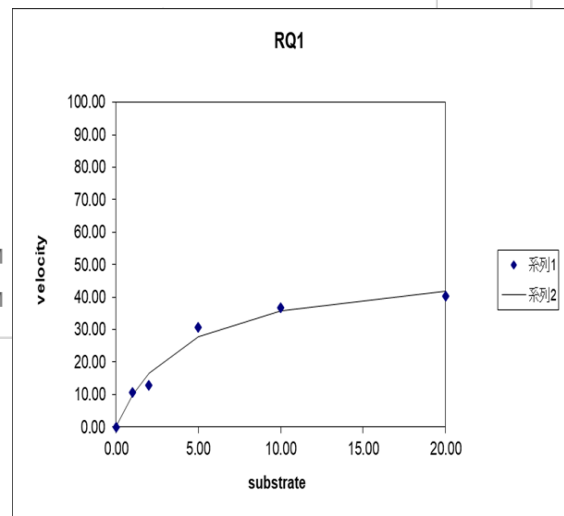
R235Q at 1 mM NADPH



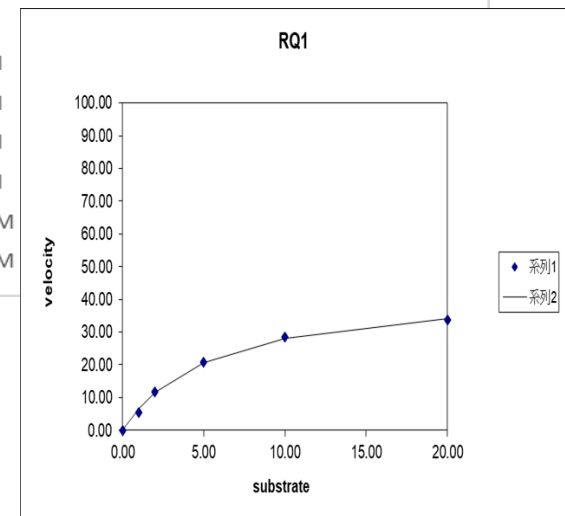
- 0 μM
- 0.5 μM
- 1 μM
- 2 μM
- 5 μM
- 10 μM
- 20 μM



Km 5.42 Vmax 65.48



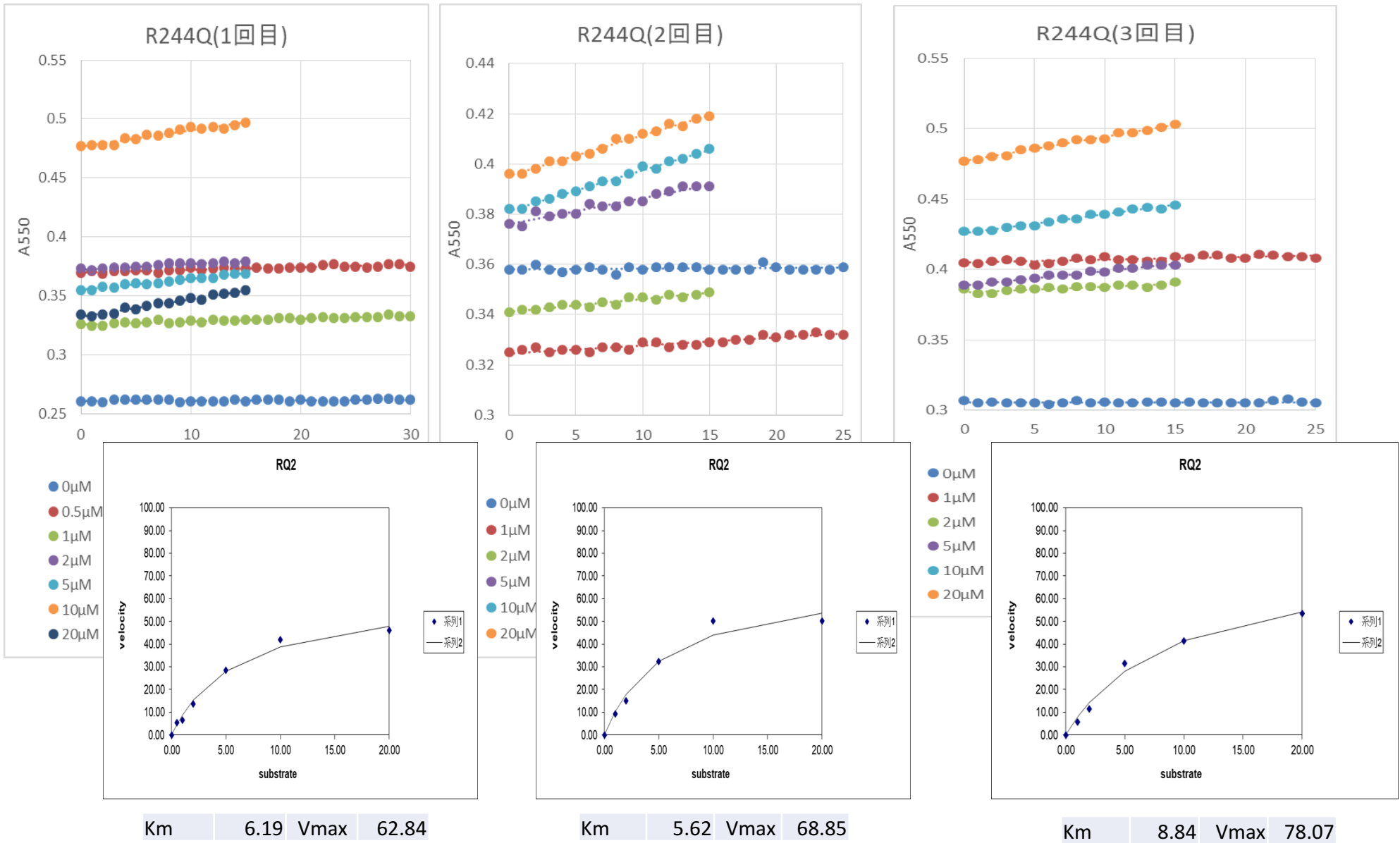
Km 4.1 Vmax 50.4



Km 5.61 Vmax 43.7

	R235Q
Vmax (e/s)	53.19±9.11
Km (μM)	5.04±0.67

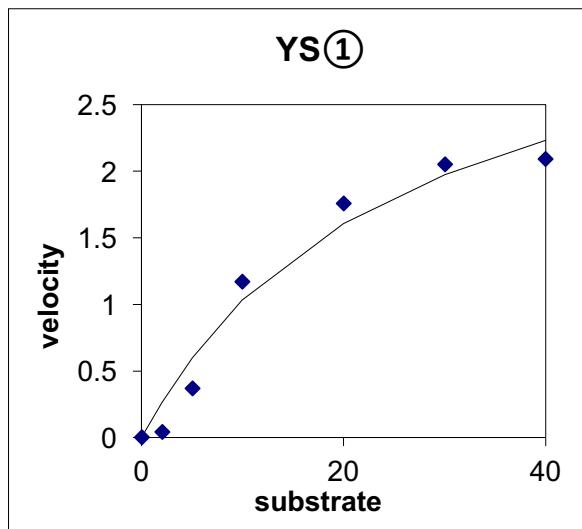
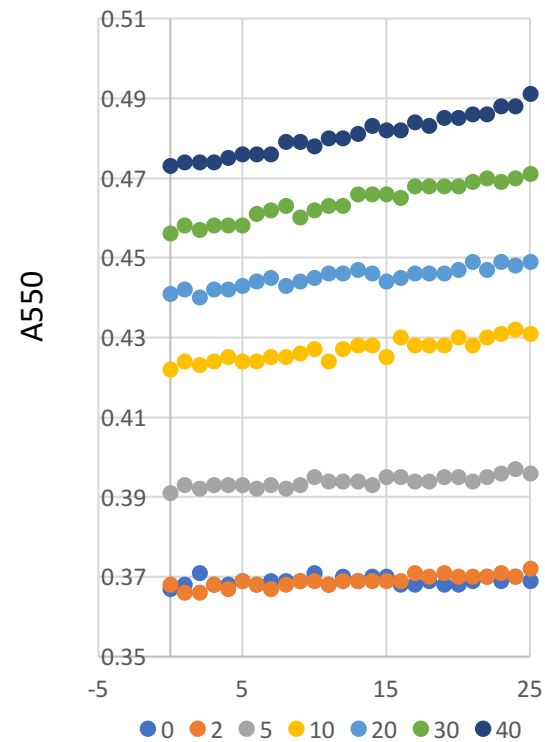
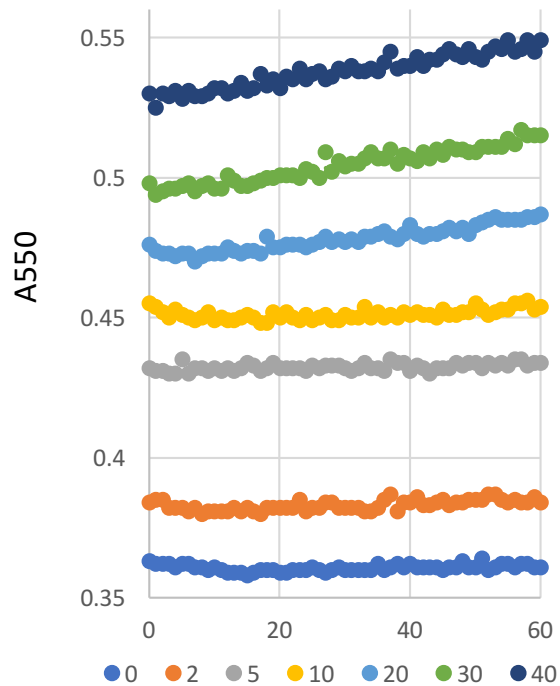
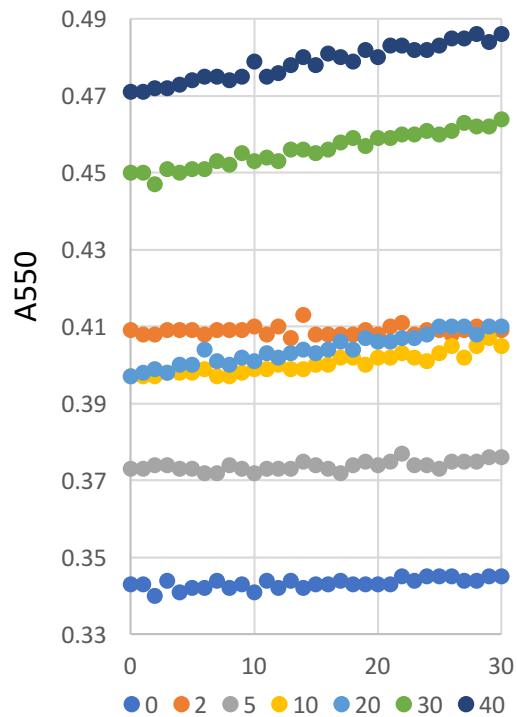
R244Q at 1 mM NADPH



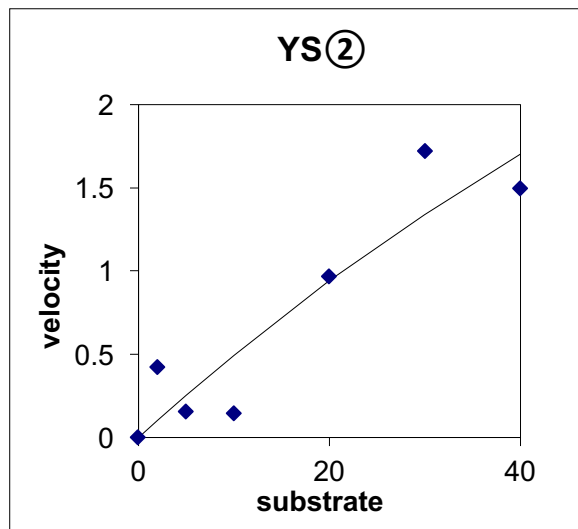
	R244Q
Vmax (e/s)	69.92±6.26
Km (μM)	6.88±1.4

Cyt c reduction assay of Y314S FNR at 1 mM NADPH

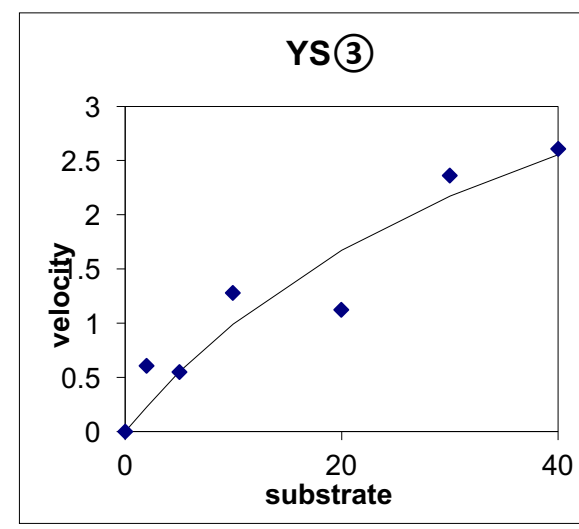
numbers below X-axis: concentration of LFd (μM)



$K_m = 25.30715282$
 $V_{max} = 3.644712207$



Not determined



Not determined