

## Supporting informations

Data for binding isotherms (parameters from Freundlich-Langmuir model fitting calculations:

$$B_{\max} = a, K_{\text{eq}} = b, n = c)$$

PenG – hMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1050	0.1996
0.1600	0.2653
0.2900	0.3879
0.4450	0.5170
0.8979	0.7379
1.4030	0.9918
1.8520	1.1934
2.8061	1.4023
3.4515	1.6189
4.6300	1.7807
5.5841	1.9489
7.0432	2.1221

$r^2$	Coef Det	DF	Adj $r^2$	Fit Std Err	F-value
0.9991259104	0.9988636835	0.0225144924	6286.7611329		

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.528302249	0.430907436	10.50875866	3.579881376	5.476723122	0.00000
b	0.119524259	0.029347798	4.072682418	0.054930192	0.184118326	0.00184
c	0.706033558	0.025925141	27.23354734	0.648972707	0.763094409	0.00000

Area Xmin-Xmax	Area Precision	Function min	X-Value	Function max	X-Value
10.327036917	1.196632e-11	0.1968840258	0.1050001865	2.1267050748	7.0432000000
1st Deriv min	X-Value	1st Deriv max	X-Value		
0.1130647814	7.0432000000	1.2663112560	0.1050001865		
2nd Deriv min	X-Value	2nd Deriv max	X-Value		
1.9417713439	0.4519049570	0.0043823151	6.7555695473		

Procedure	Minimization	Iterations	$r^2$	Coef Det	DF	Adj $r^2$	Fit Std Err	Max Abs Err
LevMarqdt	PearsonVII Lim	11	0.9991259104	0.9988636835	0.0225144924	0.0402746268		

$r^2$  Attainable  
1.0000000000

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	6.3735482	2	3.1867741	6286.76	0.00000
Error	0.005575926	11	0.00050690237		
Total	6.3791241	13			
Lack Fit	0.005575926	9	0.00061954734	0	1.00000
Pure Err	0	2	0		

PenG – hNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.2550	0.1158
0.4490	0.1652
0.5612	0.2274
1.1786	0.3060
1.5153	0.4099
2.8341	0.5535
3.9846	0.7310
5.5560	0.8554
6.9310	0.9898
8.7269	1.0805
10.2702	1.2046
12.2345	1.2778
13.9181	1.3857

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9983158086      0.9977544115      0.0201925830      2963.7837048

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	3.810572988	0.824531768	4.621499296	1.973401719	5.647744256	0.00095
b	0.032608903	0.016343665	1.995201350	-0.00380705	0.069024859	0.07398
c	0.720853721	0.043647195	16.51546500	0.623601710	0.818105732	0.00000

Area Xmin-Xmax      Area Precision  
 12.554640895      1.878114e-12

Function min	X-Value	Function max	X-Value
0.1169468405	0.2550003390	1.3769951063	13.918118809
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0455463907	13.918118809	0.3204479750	0.2550003390
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.1071907689	0.9381346182	0.0003400562	13.581185579

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      9  
 $r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9983158086      0.9977544115      0.0201925830      0.0268073337

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	2.4169088	2	1.2084544	2963.78	0.00000
Error	0.0040774041	10	0.00040774041		
Total	2.4209862	12			

PenG – pMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.3250	0.1076
0.5950	0.1506
0.9150	0.1898
1.7250	0.2508
2.6800	0.2964
4.9400	0.3485
7.3950	0.3827
10.0050	0.4060
12.6450	0.4184
15.3500	0.4334
18.0700	0.4367
20.7850	0.4483
23.5550	0.4453

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9996261972      0.9995015963      0.0025557498      13371.037860

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.510623832	0.005044327	101.2273360	0.499384370	0.521863294	0.00000
b	0.556338068	0.018655308	29.82197163	0.514771451	0.597904685	0.00000
c	0.779321569	0.015802195	49.31729911	0.744112085	0.814531053	0.00000

Area Xmin-Xmax      Area Precision  
 9.0615462899      4.410416e-11

Function min	X-Value	Function max	X-Value
0.1065587589	0.3250006243	0.4500322044	23.555000000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0017668054	23.555000000	0.2021956865	0.3250006243
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0460428769	1.4865000000	1.486536e-05	23.477475280

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      7

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9996261972      0.9995015963      0.0025557498      0.0047488199

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.17467541	2	0.087337706	13371	0.00000
Error	6.5318569e-05	10	6.5318569e-06		
Total	0.17474073	12			

PenG – pNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.9100	0.0481
1.5153	0.0580
1.8801	0.0923
3.1989	0.0989
4.1530	0.1447
6.7346	0.1674
9.0917	0.2109
11.7855	0.2195
14.1987	0.2579
17.0329	0.2556
19.4461	0.2991
22.1680	0.3069
25.0302	0.3053

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9867025157      0.9822700210      0.0119303440      371.01097317

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.563022102	0.159100257	3.538788148	0.208524639	0.917519566	0.00537
b	0.053223862	0.038002386	1.400540005	-0.03145073	0.137898455	0.19161
c	0.787377380	0.125312946	6.283288413	0.508162737	1.066592023	0.00009

Area Xmin-Xmax      Area Precision  
 5.3986088968      1.379271e-09  
 Function min      X-Value      Function max      X-Value  
 0.0475269880      0.9100016971      0.3131656915      25.030165278  
 1st Deriv min      X-Value      1st Deriv max      X-Value  
 0.0043717815      25.030165278      0.0376513137      0.9100016971  
 2nd Deriv min      X-Value      2nd Deriv max      X-Value  
 0.0029920553      2.1159778114      1.665975e-05      24.000351291

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      8  
 $r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9867025157      0.9822700210      0.0119303440      0.0150019955  
 Source      Sum of Squares      DF      Mean Square      F Statistic      P>F  
 Regr      0.10561429      2      0.052807145      371.011      0.00000  
 Error      0.0014233311      10      0.0001423311  
 Total      0.10703762      12

PenV – hMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1000	0.2480
0.1800	0.3608
0.2800	0.4822
0.5921	0.7137
0.7722	0.9522
1.3128	1.1553
1.6217	1.3545
2.3167	1.5545
2.8058	1.7777
3.7068	1.9473
4.3760	2.0939

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9973447601      0.9962068001      0.0375042179      1502.4551972

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.780980949	1.011405081	4.727068350	2.448676652	7.113285246	0.00149
b	0.160952464	0.086490712	1.860921944	-0.03849548	0.360400404	0.09979
c	0.707871579	0.056909801	12.43848269	0.576637342	0.839105816	0.00000

Area Xmin-Xmax      Area Precision  
 6.2274467878      3.385871e-13

Function min	X-Value	Function max	X-Value
0.2439733015	0.1000001859	2.0954477009	4.3760296540
1st Deriv min	X-Value	1st Deriv max	X-Value
0.1903989573	4.3760296540	1.6388849597	0.1000001859
2nd Deriv min	X-Value	2nd Deriv max	X-Value
5.7527128904	0.3137960841	0.0173339749	4.2099303708

Procedure	Minimization	Iterations
LevMarqdt	PearsonVII Lim	9

$r^2$ Coef Det	DF Adj $r^2$	Fit Std Err	Max Abs Err
0.9973447601	0.9962068001	0.0375042179	0.0627603094

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	4.2266059	2	2.1133029	1502.46	0.00000
Error	0.011252531	8	0.0014065664		
Total	4.2378584	10			

PenV – hNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.2650	0.1020
0.4633	0.1464
0.5663	0.1994
1.1326	0.2755
1.4415	0.3636
2.6514	0.5077
3.6553	0.6706
5.0453	0.7820
6.2037	0.9234
7.7739	1.0243
9.1124	1.1245
10.8114	1.2246
12.2529	1.3481

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9985749009      0.9980998678      0.0179871445      3503.5278692

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.804151915	1.404203563	3.421264581	1.675391399	7.932912431	0.00653
b	0.022428169	0.013556539	1.654417054	-0.00777768	0.052634020	0.12905
c	0.742527656	0.042796622	17.35014616	0.647170838	0.837884473	0.00000

Area Xmin-Xmax      Area Precision  
 10.235576264      3.471366e-13  
 Function min      X-Value      Function max      X-Value  
 0.1045265907      0.2650005213      1.3310255987      12.252883031  
 1st Deriv min      X-Value      1st Deriv max      X-Value  
 0.0583128947      12.252883031      0.2865096105      0.2650005213  
 2nd Deriv min      X-Value      2nd Deriv max      X-Value  
 0.1039850403      0.8643718613      0.0004169353      11.983037825

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      10  
 $r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9985749009      0.9980998678      0.0179871445      0.0219199682

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	2.2670444	2	1.1335222	3503.53	0.00000
Error	0.0032353737	10	0.00032353737		
Total	2.2702797	12			

PenV – pMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.3600	0.0925
0.6693	0.1245
0.8752	0.1705
1.7762	0.2084
2.4712	0.2627
4.6334	0.3095
6.6670	0.3627
9.1382	0.3727
11.3262	0.4071
13.9261	0.4091
16.1913	0.4391
18.8427	0.4337
21.1851	0.4416

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9944050420      0.9925400560      0.0102823083      888.66175623

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.547612004	0.032599851	16.79799082	0.474975009	0.620249000	0.00000
b	0.332689978	0.065145278	5.106893177	0.187537252	0.477842704	0.00046
c	0.750620009	0.064244092	11.68387602	0.607475251	0.893764767	0.00000

Area Xmin-Xmax      Area Precision  
 7.6765161960      7.854345e-12

Function min	X-Value	Function max	X-Value
0.0925287290	0.3600005455	0.4448880436	21.185131796
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0029569127	21.185131796	0.1603287810	0.3600005455
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0398210701	1.4012496380	2.776059e-05	20.412893457

Procedure      Minimization      Iterations

LevMarqdt      PearsonVII Lim      7

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9944050420      0.9925400560      0.0102823083      0.0151401223

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.18790906	2	0.093954531	888.662	0.00000
Error	0.0010572586	10	0.00010572586		
Total	0.18896632	12			

PenV – pNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.7900	0.0495
1.1841	0.0743
1.8019	0.0771
2.6256	0.1234
3.8355	0.1302
5.8433	0.1848
8.2630	0.2031
10.4252	0.2440
12.9479	0.2466
15.1617	0.2827
17.7358	0.2847
20.0268	0.3121
22.4979	0.3172

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9916263136      0.9888350848      0.0095354281      592.10858264

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.592047122	0.141873214	4.173071886	0.275933901	0.908160343	0.00191
b	0.054542027	0.034259082	1.592045774	-0.02179197	0.130876020	0.14246
c	0.749008974	0.096270876	7.780223962	0.534504095	0.963513853	0.00002

Area Xmin-Xmax      Area Precision  
 4.9779999497      2.188092e-09

Function min	X-Value	Function max	X-Value
0.0512999614	0.7900015273	0.3186660842	22.497940692
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0048988282	22.497940692	0.0444236360	0.7900015273
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0049469637	1.8752091847	2.185991e-05	21.502958750

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      8

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9916263136      0.9888350848      0.0095354281      0.0115142048

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.10767422	2	0.053837111	592.109	0.00000
Error	0.00090924389	10	9.0924389e-05		
Total	0.10858347	12			



amp – hMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1350	0.2564
0.2450	0.3792
0.3800	0.4958
0.6731	0.7486
1.1578	0.9610
1.6156	1.1842
2.2618	1.3887
2.9080	1.5626
3.7427	1.7787
4.7120	1.9341
5.7083	2.0794

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9994915133      0.9992735904      0.0161793552      7862.4784810

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.408185665	0.355730823	12.39191372	3.587868917	5.228502413	0.00000
b	0.150504648	0.031458284	4.784261155	0.077961714	0.223047582	0.00138
c	0.714167650	0.024507805	29.14041656	0.657652550	0.770682750	0.00000

Area Xmin-Xmax      Area Precision  
 8.1732242394      2.467398e-13

Function min	X-Value	Function max	X-Value
0.2568801349	0.1350002423	2.0847047088	5.7083000000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.1374729243	5.7083000000	1.2797377064	0.1350002423
2nd Deriv min	X-Value	2nd Deriv max	X-Value
2.6517750833	0.4136650000	0.0079851521	5.5011237091

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      8

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9994915133      0.9992735904      0.0161793552      0.0295246495

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	4.1163461	2	2.058173	7862.48	0.00000
Error	0.0020941723	8	0.00026177153		
Total	4.1184403	10			

amp – hNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1850	0.1159
0.3250	0.1691
0.4750	0.2224
0.7539	0.3251
1.2655	0.4122
2.0733	0.6072
3.2042	0.7564
4.2543	0.9023
5.6275	1.0736
6.8661	1.1980
8.4278	1.3102
9.8279	1.4135
11.6051	1.5161

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9994059761      0.9992079681      0.0133424415      8412.1699065

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	3.922447712	0.450548123	8.705946190	2.918563935	4.926331490	0.00001
b	0.046613191	0.012391569	3.761685851	0.019003054	0.074223328	0.00371
c	0.737800492	0.025932230	28.45110037	0.680019882	0.795581102	0.00000

Area Xmin-Xmax      Area Precision  
 11.616180314      5.035183e-12

Function min	X-Value	Function max	X-Value
0.1142009498	0.1850003069	1.5241478927	11.605100000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0592466058	11.605100000	0.4421851223	0.1850003069
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.2129226110	0.7560050000	0.0006551535	11.182048470

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      9

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9994059761      0.9992079681      0.0133424415      0.0202176342

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	2.9950815	2	1.4975407	8412.17	0.00000
Error	0.0017802074	10	0.00017802074		
Total	2.9968617	12			

amp – pMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.5250	0.0836
0.9424	0.1084
1.2386	0.1490
2.3964	0.1641
3.3119	0.2118
5.8968	0.2210
8.2124	0.2634
11.0396	0.2467
13.4360	0.2686
16.2363	0.2663
18.7135	0.2844
21.5407	0.2705
23.9910	0.2927

$r^2$	Coef Det	DF	Adj $r^2$	Fit Std Err	F-value
0.9746312754	0.9661750338	0.0121626133	192.09307710		

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.314473459	0.021529320	14.60675295	0.266503144	0.362443773	0.00000
b	0.573174998	0.120542424	4.754964923	0.304589740	0.841760256	0.00077
c	0.840781883	0.139706431	6.018204558	0.529496555	1.152067211	0.00013

Area Xmin-Xmax	Area Precision	Function min	X-Value	Function max	X-Value
5.8169658103	7.564122e-13	0.0839758538	0.5250010204	0.2832113211	23.991000000
1st Deriv min	X-Value	1st Deriv max	X-Value		
0.0009866890	23.991000000	0.0985734701	0.5250010204		
2nd Deriv min	X-Value	2nd Deriv max	X-Value		
0.0218332618	1.6982909450	8.652807e-06	23.286789066		

Procedure	Minimization	Iterations	$r^2$	Coef Det	DF	Adj $r^2$	Fit Std Err	Max Abs Err	Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
LevMarqdt	PearsonVII Lim	8	0.9746312754	0.9661750338	0.0121626133	192.093	0.0161467471		Regr	0.056832336	2	0.028416168	192.093	0.00000
									Error	0.0014792916	10	0.00014792916		
									Total	0.058311628	12			

amp – pNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.8616	0.0483
1.4001	0.0616
1.8579	0.0850
2.9618	0.1076
3.9850	0.1403
6.3007	0.1802
8.6163	0.2152
11.0935	0.2364
13.5706	0.2527
15.9940	0.2769
18.6058	0.2924
21.0022	0.3277
23.7217	0.3196

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9955676233      0.9940901644      0.0072034740      1123.0629602

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.569443427	0.087498774	6.508016041	0.374484008	0.764402845	0.00007
b	0.059956861	0.022826808	2.626598588	0.009095564	0.110818158	0.02531
c	0.812620378	0.073416942	11.06856743	0.649037236	0.976203520	0.00000

Area Xmin-Xmax      Area Precision  
 5.2960610668      1.148732e-09

Function min	X-Value	Function max	X-Value
0.0470226999	0.8616295467	0.3251970269	23.721694176
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0047782202	23.721694176	0.0406859539	0.8616295467
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0033414706	2.0046290441	1.956937e-05	22.861689876

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      9

$r^2$ Coef Det	DF Adj $r^2$	Fit Std Err	Max Abs Err
0.9955676233	0.9940901644	0.0072034740	0.0163518480

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.11655156	2	0.058275779	1123.06	0.00000
Error	0.00051890037	10	5.1890037e-05		
Total	0.11707046	12			

oxa – hMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1100	0.2257
0.2050	0.3303
0.3542	0.4328
0.6376	0.6453
0.8974	0.8547
1.4406	1.0160
1.9602	1.2204
2.4561	1.4216
3.3063	1.5734
3.9676	1.7299
5.0303	1.8395

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9974556515      0.9963652164      0.0324061585      1568.1116590

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	3.700081804	0.597473802	6.192877058	2.322304746	5.077858861	0.00026
b	0.203043216	0.083459643	2.432831112	0.010584934	0.395501497	0.04102
c	0.744204779	0.056158103	13.25195717	0.614703961	0.873705597	0.00000

Area Xmin-Xmax      Area Precision  
 6.4420879364      4.189167e-13

Function min	X-Value	Function max	X-Value
0.2063453405	0.1100002140	1.8645956703	5.0303000000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.1368431370	5.0303000000	1.3181729882	0.1100002140
2nd Deriv min	X-Value	2nd Deriv max	X-Value
3.4068114524	0.3559987367	0.0111499163	4.8031156333

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      10

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9974556515      0.9963652164      0.0324061585      0.0422668603

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	3.2935335	2	1.6467667	1568.11	0.00000
Error	0.0084012729	8	0.0010501591		
Total	3.3019348	10			

oxa – hNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1850	0.1004
0.3200	0.1448
0.4251	0.1923
0.8738	0.2667
1.1572	0.3568
2.1491	0.4942
3.0465	0.6272
4.2510	0.7553
5.3374	0.9007
6.7780	0.9850
7.9824	1.0901
9.5411	1.1725
10.8873	1.2722

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9988720338      0.9984960450      0.0152574215      4427.7568592

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.143041881	0.939908207	4.407921805	2.048795887	6.237287875	0.00132
b	0.028857184	0.014638176	1.971364682	-0.00375871	0.061473073	0.07697
c	0.707456160	0.035953690	19.67687218	0.627346347	0.787565974	0.00000

Area Xmin-Xmax      Area Precision  
 8.9176840778      3.563657e-12

Function min	X-Value	Function max	X-Value
0.0997670255	0.1850002803	1.2675888173	10.887277708
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0571670248	10.887277708	0.3723300701	0.1850002803
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.2075982205	0.7201111938	0.0005638477	10.584572686

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      10  
 $r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9988720338      0.9984960450      0.0152574215      0.0295802816

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	2.0614654	2	1.0307327	4427.76	0.00000
Error	0.0023278891	10	0.00023278891		
Total	2.0637933	12			

oxa – pMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.6100	0.0569
0.9447	0.0823
1.4406	0.0927
2.2436	0.1298
3.3063	0.1419
5.2665	0.1824
7.5337	0.1911
9.6592	0.2144
12.0209	0.2165
14.2881	0.2264
16.5080	0.2352
18.7752	0.2442
21.2314	0.2355

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9935275149      0.9913700199      0.0057286521      767.50081214

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.289719224	0.016038174	18.06435199	0.253983945	0.325454503	0.00000
b	0.320101070	0.051905972	6.166941029	0.204447356	0.435754783	0.00011
c	0.848479218	0.076172832	11.13886929	0.678755572	1.018202865	0.00000

Area Xmin-Xmax      Area Precision  
 4.1287875148      7.33157e-09

Function min	X-Value	Function max	X-Value
0.0579613230	0.6100008408	0.2420951662	21.231372364
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0015903706	21.231372364	0.0644920678	0.6100008408
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0134122882	1.6410669770	1.661407e-05	20.394608286

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      8

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9935275149      0.9913700199      0.0057286521      0.0066253570

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.050374846	2	0.025187423	767.501	0.00000
Error	0.00032817455	10	3.2817455e-05		
Total	0.050703021	12			

oxa – pNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.9400	0.0237
1.4642	0.0301
1.8893	0.0469
3.0465	0.0490
3.9676	0.0750
6.2348	0.0847
8.2658	0.1155
10.5330	0.1246
12.7294	0.1406
15.1147	0.1415
17.2402	0.1611
19.6727	0.1578
21.8218	0.1753

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9880907646      0.9841210194      0.0063535793      414.84223325

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.290467289	0.067763702	4.286473146	0.139480352	0.441454226	0.00160
b	0.068774704	0.036580895	1.880071672	-0.01273261	0.150282016	0.08951
c	0.896865414	0.129890448	6.904783424	0.607451460	1.186279369	0.00004

Area Xmin-Xmax      Area Precision  
 2.5026777356      1.727239e-10

Function min	X-Value	Function max	X-Value
0.0229402241	0.9400014371	0.1713864635	21.821800000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0028877383	21.821800000	0.0201589036	0.9400014371
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0012002463	1.9840900000	1.506994e-05	20.642834702

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      8

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9880907646      0.9841210194      0.0063535793      0.0083792185

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.033492677	2	0.016746339	414.842	0.00000
Error	0.00040367969	10	4.0367969e-05		
Total	0.033896357	12			



clx – hMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1250	0.1448
0.1800	0.1946
0.3362	0.2815
0.4203	0.3784
0.7985	0.5566
1.1558	0.7248
1.6391	0.8864
2.0804	1.0418
2.7318	1.2097
3.2781	1.3390
4.0767	1.4699
4.7281	1.6279

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9992571088      0.9989785246      0.0156319126      6052.9145817

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.222893168	0.572801016	7.372356284	2.927127248	5.518659088	0.00004
b	0.113998272	0.033586259	3.394193830	0.038020877	0.189975668	0.00795
c	0.783158593	0.032102752	24.39537280	0.710537124	0.855780063	0.00000

Area Xmin-Xmax      Area Precision  
 4.8700816231      5.576803e-09

Function min	X-Value	Function max	X-Value
0.1460376881	0.1250001988	1.6101931490	4.7281000000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.1650138863	4.7281000000	0.8833222803	0.1250001988
2nd Deriv min	X-Value	2nd Deriv max	X-Value
1.8504419113	0.3551550000	0.0104215019	4.5954571004

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      9

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9992571088      0.9989785246      0.0156319126      0.0263376832

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	2.9581403	2	1.4790702	6052.91	0.00000
Error	0.0021992102	9	0.00024435669		
Total	2.9603396	11			

clx – hNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.3250	0.0724
0.5464	0.1037
0.7145	0.1392
1.2188	0.1932
1.6181	0.2561
2.7108	0.3635
3.7194	0.4638
4.9592	0.5488
6.0730	0.6530
7.3968	0.7239
8.6156	0.8269
10.0656	0.8857
11.3054	0.9702

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9992260624      0.9989680831      0.0095942251      6455.4687713

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.486676353	1.350857983	3.321353104	1.476777198	7.496575508	0.00773
b	0.017295540	0.009426726	1.834734495	-0.00370852	0.038299596	0.09643
c	0.792791580	0.034566336	22.93536662	0.715772985	0.869810176	0.00000

Area Xmin-Xmax      Area Precision  
 6.5235998636      2.842591e-09  
 Function min      X-Value      Function max      X-Value  
 0.0725963734      0.3250004475      0.9655361745      11.305400000  
 1st Deriv min      X-Value      1st Deriv max      X-Value  
 0.0531373899      11.305400000      0.1742229854      0.3250004475  
 2nd Deriv min      X-Value      2nd Deriv max      X-Value  
 0.0516538017      0.8739837060      0.0003173420      11.305400000

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      9  
 $r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9992260624      0.9989680831      0.0095942251      0.0145958778  
 Source      Sum of Squares      DF      Mean Square      F Statistic      P>F  
 Regr      1.1884409      2      0.59422045      6455.47      0.00000  
 Error      0.00092049156      10      9.2049156e-05  
 Total      1.1893614      12

clx – pMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.4750	0.0580
0.7565	0.0817
1.1768	0.0930
1.8492	0.1315
2.7528	0.1452
4.4129	0.1896
6.4092	0.1994
8.1953	0.2331
10.2757	0.2351
12.1459	0.2562
14.2893	0.2488
16.3066	0.2616
18.2189	0.2817

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9913460126      0.9884613501      0.0077337183      572.76834796

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.375638293	0.042010588	8.941514715	0.282032869	0.469243716	0.00000
b	0.209773734	0.073392270	2.858253783	0.046245565	0.373301903	0.01701
c	0.729002585	0.085233475	8.553007865	0.539090567	0.918914603	0.00001

Area Xmin-Xmax      Area Precision  
 3.8476286079      1.519508e-13

Function min	X-Value	Function max	X-Value
0.0589514103	0.4750007716	0.2729356612	18.218900000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0029859251	18.218900000	0.0762762211	0.4750007716
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0209288529	1.3621725978	3.032376e-05	17.512921037

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      8

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9913460126      0.9884613501      0.0077337183      0.0104039974

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.068515007	2	0.034257503	572.768	0.00000
Error	0.00059810399	10	5.9810399e-05		
Total	0.069113111	12			

clx – pNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.7600	0.0292
1.2398	0.0337
1.5760	0.0541
2.5847	0.0578
3.4042	0.0817
5.4425	0.0884
7.2707	0.1156
9.4141	0.1099
11.2423	0.1374
13.4067	0.1328
15.2980	0.1519
17.4624	0.1475
19.3956	0.1628

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9772791138      0.9697054851      0.0076079113      215.06183898

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.289475647	0.110893088	2.610402975	0.042390449	0.536560845	0.02602
b	0.067269346	0.069890043	0.962502567	-0.08845537	0.222994067	0.35849
c	0.731488285	0.158721406	4.608630318	0.377834953	1.085141617	0.00097

Area Xmin-Xmax      Area Precision  
 2.1624668891      1.346146e-09

Function min	X-Value	Function max	X-Value
0.0295298906	0.7600013112	0.1587745798	19.395600000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0027036610	19.395600000	0.0255226386	0.7600013112
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0038916888	1.6917765673	1.544373e-05	18.915577691

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      9

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9772791138      0.9697054851      0.0076079113      0.0108765414

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.024895694	2	0.012447847	215.062	0.00000
Error	0.00057880315	10	5.7880315e-05		
Total	0.025474497	12			

dcl – hMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.1300	0.1834
0.2300	0.2708
0.3500	0.3535
0.5879	0.5349
1.0189	0.6886
1.2933	0.8500
1.8811	0.9773
2.2730	1.1442
2.9589	1.2709
3.4879	1.4157
4.3109	1.5278

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9977699233      0.9968141762      0.0248172599      1789.6603037

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.067871294	1.014123158	4.011220195	1.729299100	6.406443488	0.00389
b	0.116693144	0.068072773	1.714241070	-0.04028295	0.273669241	0.12483
c	0.726418442	0.055089572	13.18613344	0.599381662	0.853455222	0.00000

Area Xmin-Xmax      Area Precision  
 4.3469030666      4.487332e-09

Function min	X-Value	Function max	X-Value
0.1852515690	0.1300001641	1.5366534032	4.3109000000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.1611228602	4.3109000000	0.9880126591	0.1300001641
2nd Deriv min	X-Value	2nd Deriv max	X-Value
2.8820657117	0.3390446609	0.0118683656	4.2980319611

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      10  
 $r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9977699233      0.9968141762      0.0248172599      0.0374629442

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	2.2044906	2	1.1022453	1789.66	0.00000
Error	0.0049271711	8	0.00061589639		
Total	2.2094178	10			

dcl – hNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.2100	0.0768
0.3919	0.1075
0.4703	0.1509
0.8818	0.2077
1.1757	0.2773
2.0967	0.3787
2.8609	0.4975
3.9386	0.5855
4.8400	0.6844
6.0157	0.7699
6.9955	0.8760
8.3083	0.9337
9.3665	1.0223

$r^2$ Coef Det	DF Adj $r^2$	Fit Std Err	F-value
0.9985784942	0.9981046589	0.0137025431	3512.3967845

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	4.857257185	2.049068796	2.370470525	0.291647389	9.422866982	0.03925
b	0.017647483	0.014396502	1.225817454	-0.01442992	0.049724889	0.24835
c	0.737544794	0.043734915	16.86398126	0.640097330	0.834992258	0.00000

Area Xmin-Xmax	Area Precision		
5.8577199835	2.439153e-13		
Function min	X-Value	Function max	X-Value
0.0769856112	0.2100003982	1.0178726290	9.3665000000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0633541422	9.3665000000	0.2660965946	0.2100003982
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.1595482741	0.6678213504	0.0006355274	9.2863450840

Procedure	Minimization	Iterations			
LevMarqdt	PearsonVII Lim	10			
$r^2$ Coef Det	DF Adj $r^2$	Fit Std Err	Max Abs Err		
0.9985784942	0.9981046589	0.0137025431	0.0205447690		
Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	1.318973	2	0.65948652	3512.4	0.00000
Error	0.0018775969	10	0.00018775969		
Total	1.3208506	12			

dcl – pMIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.4950	0.0483
0.8426	0.0624
1.0777	0.0886
1.8419	0.1085
2.5082	0.1399
4.1934	0.1707
5.8198	0.2016
7.6617	0.2132
9.4057	0.2346
11.3260	0.2389
13.1092	0.2509
15.0687	0.2576
16.9498	0.2613

$r^2$	Coef Det	DF Adj $r^2$	Fit Std Err	F-value
0.9970259886		0.9960346514	0.0046178393	1676.2309365

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.329528585	0.015699074	20.99031953	0.294548868	0.364508302	0.00000
b	0.269742652	0.034843739	7.741495640	0.192105964	0.347379340	0.00002
c	0.902066362	0.056006364	16.10649751	0.777276407	1.026856318	0.00000

Area Xmin-Xmax	Area Precision	Function min	X-Value	Function max	X-Value
3.4144011527	2.74001e-09	0.0460941268	0.4950006626	0.2628187913	16.949800000
1st Deriv min	X-Value	0.0028315669	16.949800000	1st Deriv max	X-Value
2nd Deriv min	X-Value	0.0170092574	1.3177192253	2nd Deriv max	X-Value

Procedure	Minimization	Iterations	$r^2$	Coef Det	DF Adj $r^2$	Fit Std Err	Max Abs Err
LevMarqdt	PearsonVII Lim	8	0.9970259886		0.9960346514	0.0046178393	0.0071934460
Source	Sum of Squares	DF	Mean Square	F Statistic	P>F		
Regr	0.071489373	2	0.035744686	1676.23	0.00000		
Error	0.0002132444	10	2.132444e-05				
Total	0.071702617	12					

dcl – pNIP

Free, $\mu\text{M}$	Bound, $\mu\text{mol/g}$
0.7200	0.0261
1.0581	0.0413
1.5480	0.0416
2.2730	0.0672
3.2332	0.0688
4.8596	0.1034
6.7603	0.1087
8.4455	0.1348
10.4050	0.1347
12.1490	0.1551
14.1477	0.1520
15.9113	0.1734
17.9100	0.1679

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      F-value  
 0.9852991729      0.9803988971      0.0068774298      335.11691649

Parm	Value	Std Error	t-value	95% Confidence Limits		P> t
a	0.284041243	0.069379006	4.094051788	0.129455185	0.438627302	0.00217
b	0.093506042	0.056835241	1.645212380	-0.03313077	0.220142850	0.13095
c	0.832625307	0.134582483	6.186728682	0.532756848	1.132493766	0.00010

Area Xmin-Xmax      Area Precision  
 2.1345663446      5.683764e-10

Function min	X-Value	Function max	X-Value
0.0271662067	0.7200012095	0.1720474309	17.910000000
1st Deriv min	X-Value	1st Deriv max	X-Value
0.0031536598	17.910000000	0.0284109580	0.7200012095
2nd Deriv min	X-Value	2nd Deriv max	X-Value
0.0038402295	1.5794715905	2.467939e-05	17.515459345

Procedure      Minimization      Iterations  
 LevMarqdt      PearsonVII Lim      8

$r^2$  Coef Det      DF Adj  $r^2$       Fit Std Err      Max Abs Err  
 0.9852991729      0.9803988971      0.0068774298      0.0081008986

Source	Sum of Squares	DF	Mean Square	F Statistic	P>F
Regr	0.031701417	2	0.015850709	335.117	0.00000
Error	0.00047299041	10	4.7299041e-05		
Total	0.032174408	12			