Automatically Generated Markdown Report for ELISA

Header

Date: **20 Feb 2024**
Identification: **GN004240-073**
Protocol: **AAV9-ELISA**
Analyzed by: **sey**
Plate: **1**

Analysis Results

Sample type	Sample Name	Pre-dilution	Result [cp/ml]	CV [%]	Comment
control 01	Kontrolle01	100	**2.157e+12**	2.3	
sample 01	EHU04_2309_EMS_B_E1	2000	**2.921e+13**	8.9	
sample 02	EHU04_2309_CPX_B_E1	10	**4.851e+09**	NA	info only, 1pt valid
sample 03	EHU04_2309_SO3_B_E1	10	**3.855e+09**	NA	info only, 1pt valid
sample 04	EHU04_2309_CPFT_B_E1	2000	**3.956e+13**	3.8	
sample 05	EHU04_2309_CMX_B_E1	10	**<2.805e+9**	NA	<2.805e+9
sample 06	EHU04_2309_EMS_B_E2	50	(3.982e+12)*	NA	1 valid point
sample 07	EHU04_2309_CPX_B_E2	2000	**3.894e+13**	13.2	
sample 08	EHU04_2309_SO3_B_E2	2000	**4.888e+13**	9.0	
sample 09	EHU04_2309_CPFT_B_E2	20	(2.027e+12)*	NA	1 valid point
sample 10	EHU04_2309_CMX_B_E2	2000	**2.667e+13**	3.7	
sample 11	EHU04_2309_EMS_B_E3	10	**6.775e+11**	NA	info only, 1pt valid
sample 12	EHU04_2309_CPX_B_E3	200	**3.308e+12**	1.7	
sample 13	EHU04_2309_SO3_B_E3	200	**3.856e+12**	9.6	
sample 14	EHU04_2309_CPFT_B_E3	10	**4.927e+11**	0.8	
sample 15	EHU04_2309_CMX_B_E3	1000	**1.377e+13**	12.4	
sample 16	EHU04_2309_EMS_B_E4	10	**5.128e+11**	1.7	
sample 17	EHU04_2309_CPX_B_E4	20	(1.722e+12)*	NA	1 valid point
sample 18	EHU04_2309_SO3_B_E4	20	(1.438e+12)*	NA	1 valid point
sample 19	EHU04_2309_CPFT_B_E4	10	**3.332e+11**	9.2	
sample 20	EHU04_2309_CMX_B_E4	20	(2.442e+12)*	NA	1 valid point
sample 21	EHU04_2309_CEX_B_L	5000	**7.400e+13**	9.8	

* sample will be retested

Parameters

Parameters:

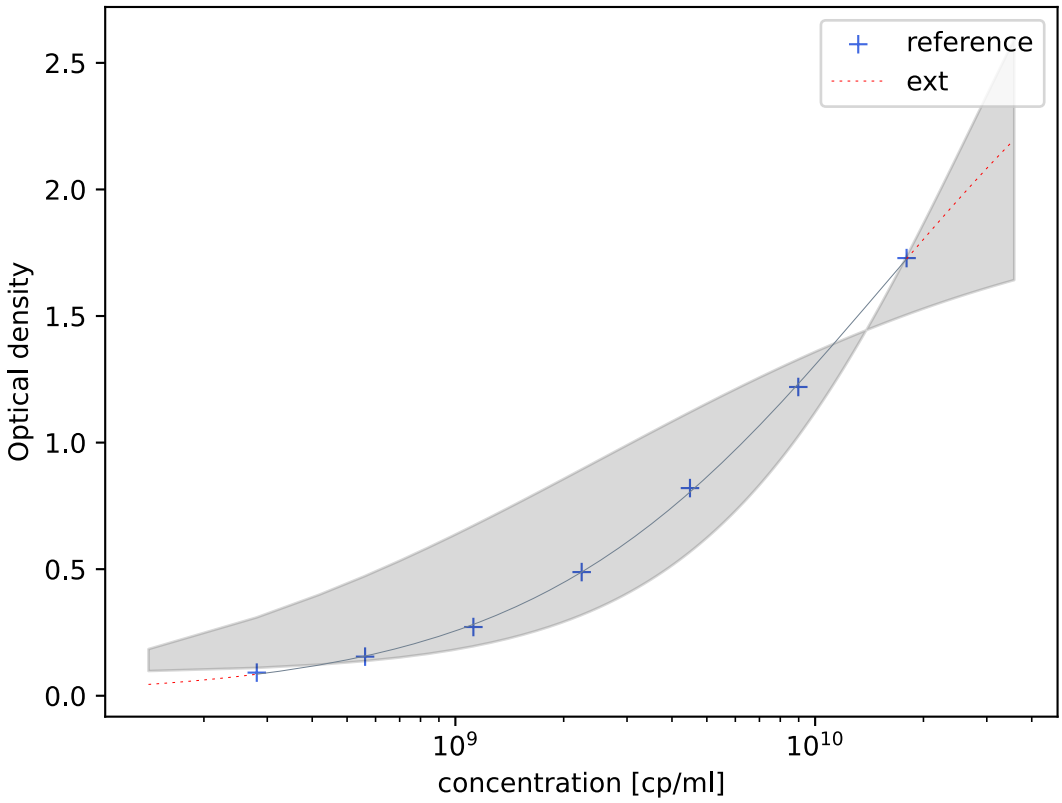
Variable	Value
TestName	240220_AAV9-ELISA
WashPlate	Wash4x.LHC
IncubationTime_Samples	3000
Incubator_Samples	1
IncubationTemperature_Samples	37
Shake_Samples	0
WashSample	Wash4x.LHC
IncubationTime_Antibody1	3000
Incubator_Antibody1	1
IncubationTemperature_Antibody1	37
Shake_Antibody1	0
WashAB1	Wash5x.LHC
Antibody2_InUse	0
IncubationTime_Antibody2	30
Incubator_Antibody2	1
IncubationTemperature_Antibody2	37

Variable	Value
Shake_Antibody2	0
WashAB2	Wash5x.LHC
IncubationTime_TMB	540
Incubator_TMB	0
IncubationTemperature_TMB	37
Shake_TMB	0
ReaderProtocol	ELISA/220808_AAV9-ELISA.sprx

Reference Curve Fit

$y = d + \frac{a-d}{1+(\frac{x}{c})^b}$

`y` Δ OD (450nm - 620nm)
`x` concentration [cp/ml]
`a` minimum value (lowest possible point)
`b` slope at inflection point `c`
`c` inflection point of the curve
`d` maximum value (highest possible point)



Verbose fitting progress, metric is R-squared:

	idx	metric	note
0	-1	0.999782	

Fit parameters

Parameter name	Estimated value	Error	Confidence interval
a	-0.00342001	0.0285247	[-0.0942, 0.0874]

Parameter name	Estimated value	Error	Confidence interval
b	0.891417	0.0785785	[0.641, 1.14]
c	1.54754e+10	4.07222e+09	[2.52e+09, 2.84e+10]
d	3.24017	0.402762	[1.96, 4.52]

Backfit...

Well	Standard Value [cp/ml]	Concentration backfit [cp/ml]	Optical density	SV to OD fit	Recovery rate [%]
('A', 5)	1.7954e+10	1.80364e+10	1.7289	1.72561	100.459
('A', 6)	8.977e+09	8.81264e+09	1.2197	1.23228	98.1691
('A', 7)	4.4885e+09	4.61977e+09	0.8203	0.804608	102.925
('A', 8)	2.24425e+09	2.24317e+09	0.4885	0.488679	99.9519
('A', 9)	1.12212e+09	1.07254e+09	0.2715	0.281808	95.581
('A', 10)	5.61062e+08	5.51421e+08	0.1545	0.156838	98.2816
('A', 11)	2.80531e+08	3.04157e+08	0.0914	0.0849856	108.422

Sample evaluation

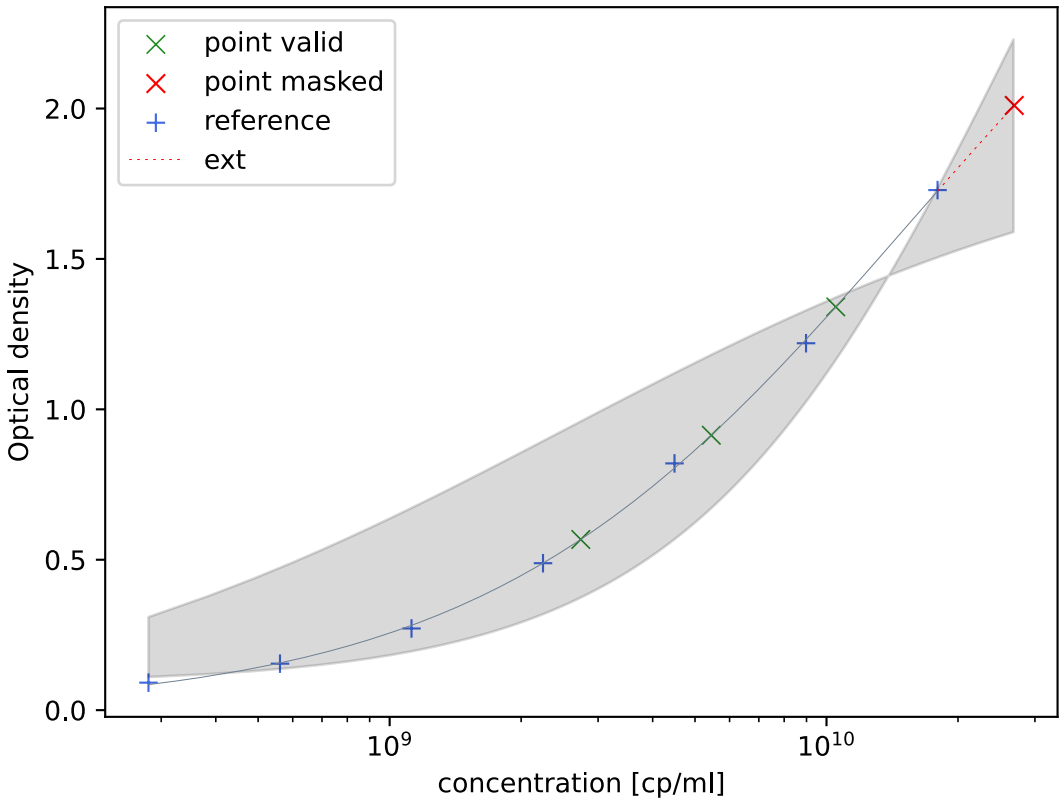
Blank

Well	OD_delta	OD_450	OD_630
('A', 12)	0.0068	0.0432	0.0364

Sample: controll 'k' 1

Well	OD_delta	plate_layout_dil	concentration	mask_reason
('A', 1)	2.0102	1	2.69031e+10	>ULOQ
('A', 2)	1.3407	2	2.09982e+10	
('A', 3)	0.9139	4	2.17939e+10	
('A', 4)	0.5674	8	2.19079e+10	

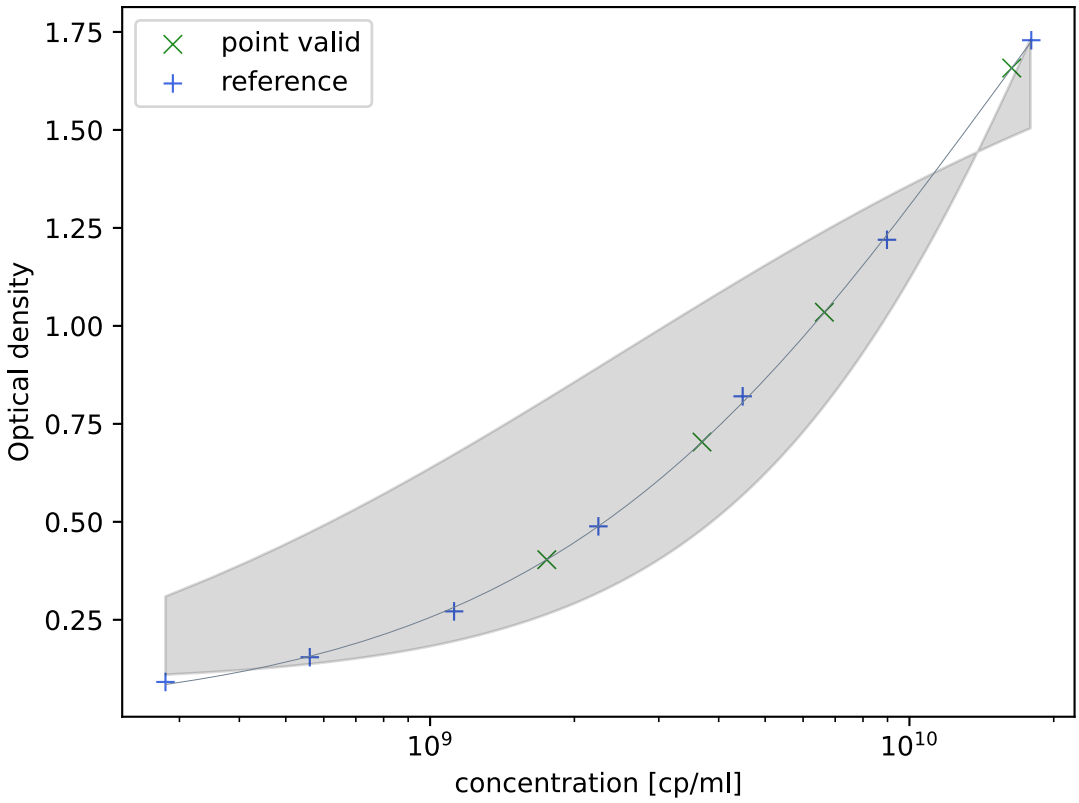
CV = 2.3 [%]
mean = 2.157e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 3;>ULOQ;Measured OD 2.010e+0 > 1.729e+0



Sample: sample ‘s’ 1

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘B’, 1)	1.6579	1	1.63453e+10	
(‘B’, 2)	1.0348	2	1.3293e+10	
(‘B’, 3)	0.7036	4	1.47674e+10	
(‘B’, 4)	0.4034	8	1.40143e+10	

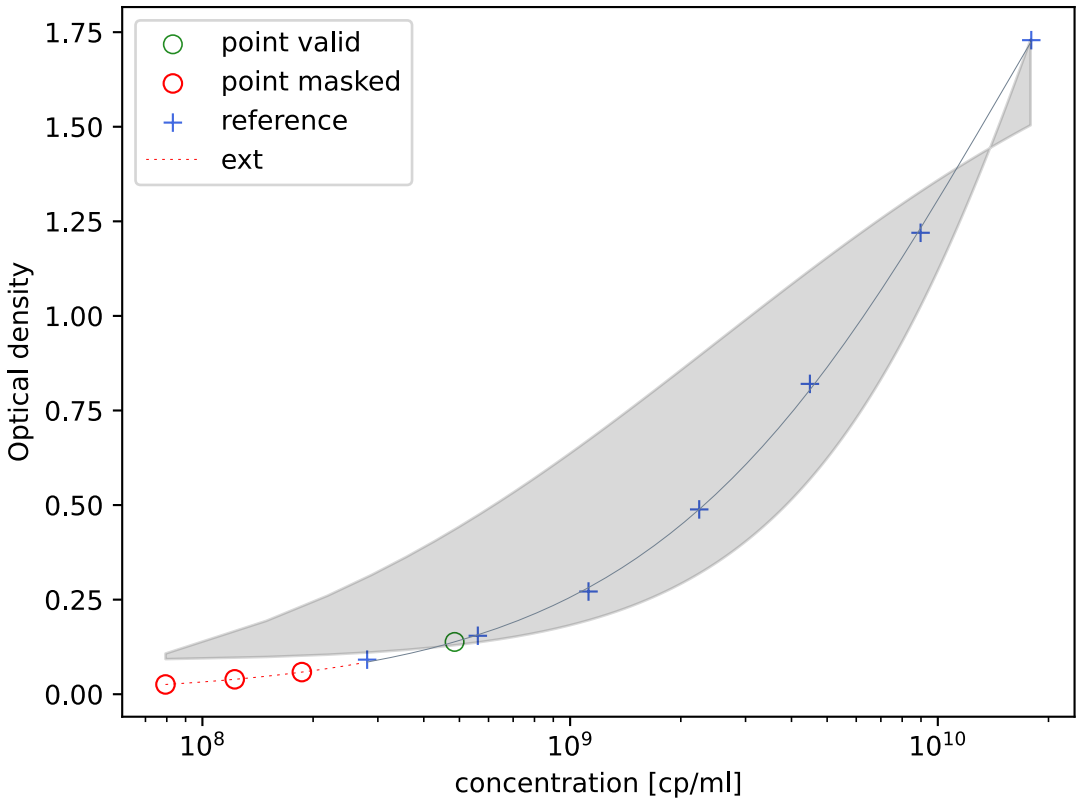
CV = 8.95 [%]
mean = 1.461e+10 [cp/ml]
valid = True



Sample: sample ‘s’ 2

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘C’, 1)	0.1382	1	4.85111e+08	
(‘C’, 2)	0.0585	2	3.72779e+08	<LOQ
(‘C’, 3)	0.0394	4	4.89632e+08	<LOQ
(‘C’, 4)	0.0258	8	6.34821e+08	<LOQ

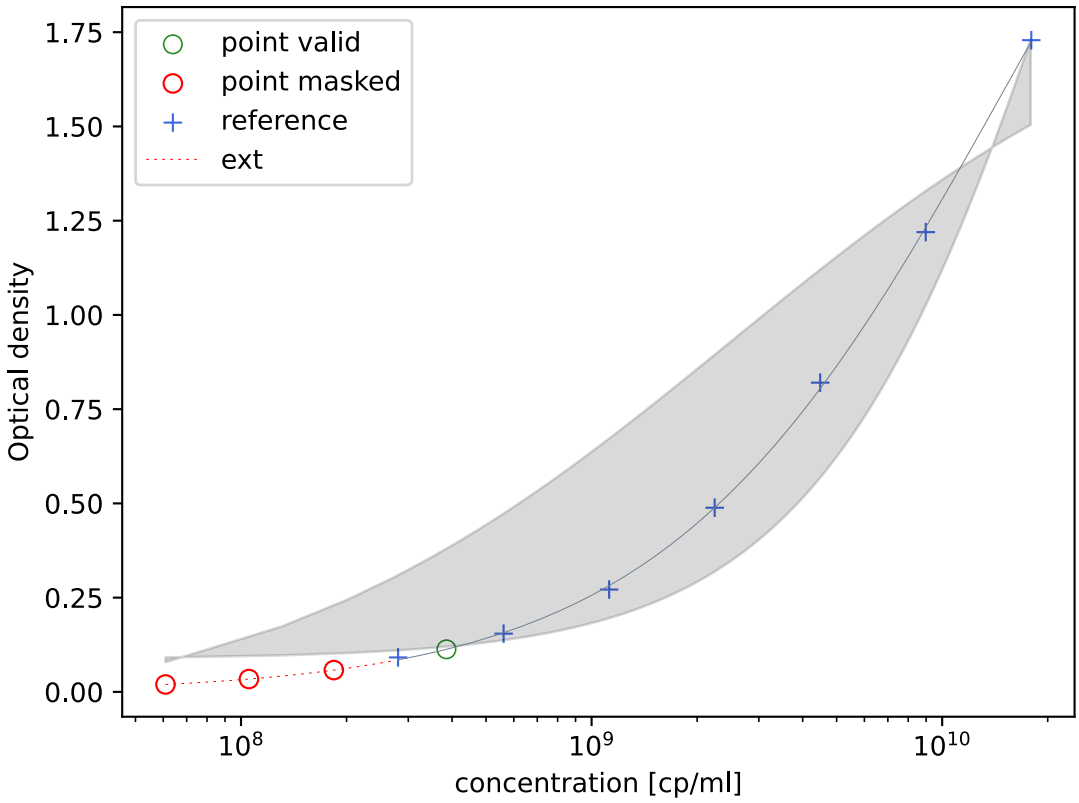
CV = nan [%]
mean = 4.851e+08 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;<LOQ;Measured OD 5.850e-2 < 9.140e-2
info: 1 valid point



Sample: sample ‘s’ 3

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘D’, 1)	0.1129	1	3.8548e+08	
(‘D’, 2)	0.0578	2	3.67964e+08	<LOQ
(‘D’, 3)	0.0341	4	4.21395e+08	<LOQ
(‘D’, 4)	0.0197	8	4.87134e+08	<LOQ

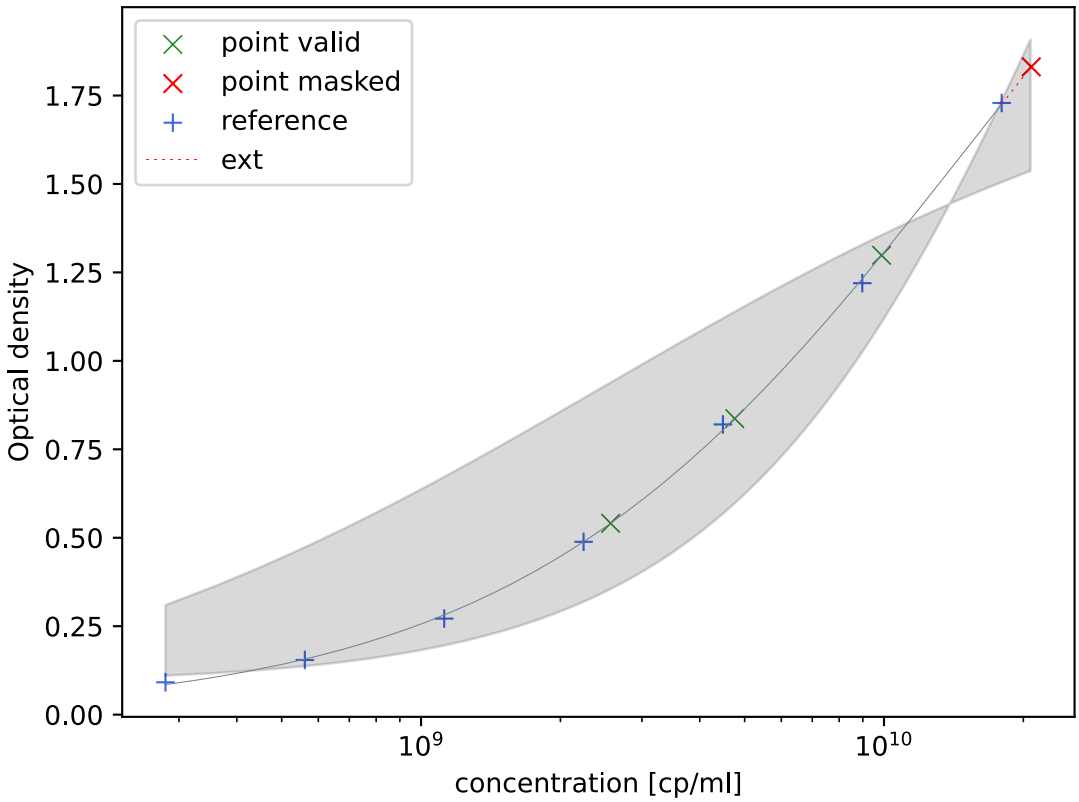
CV = nan [%]
mean = 3.855e+08 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;<LOQ;Measured OD 5.780e-2 < 9.140e-2
info: 1 valid point



Sample: sample ‘s’ 4

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘E’, 1)	1.831	1	2.08031e+10	>ULOQ
(‘E’, 2)	1.2984	2	1.97639e+10	
(‘E’, 3)	0.8368	4	1.90404e+10	
(‘E’, 4)	0.5409	8	2.05416e+10	

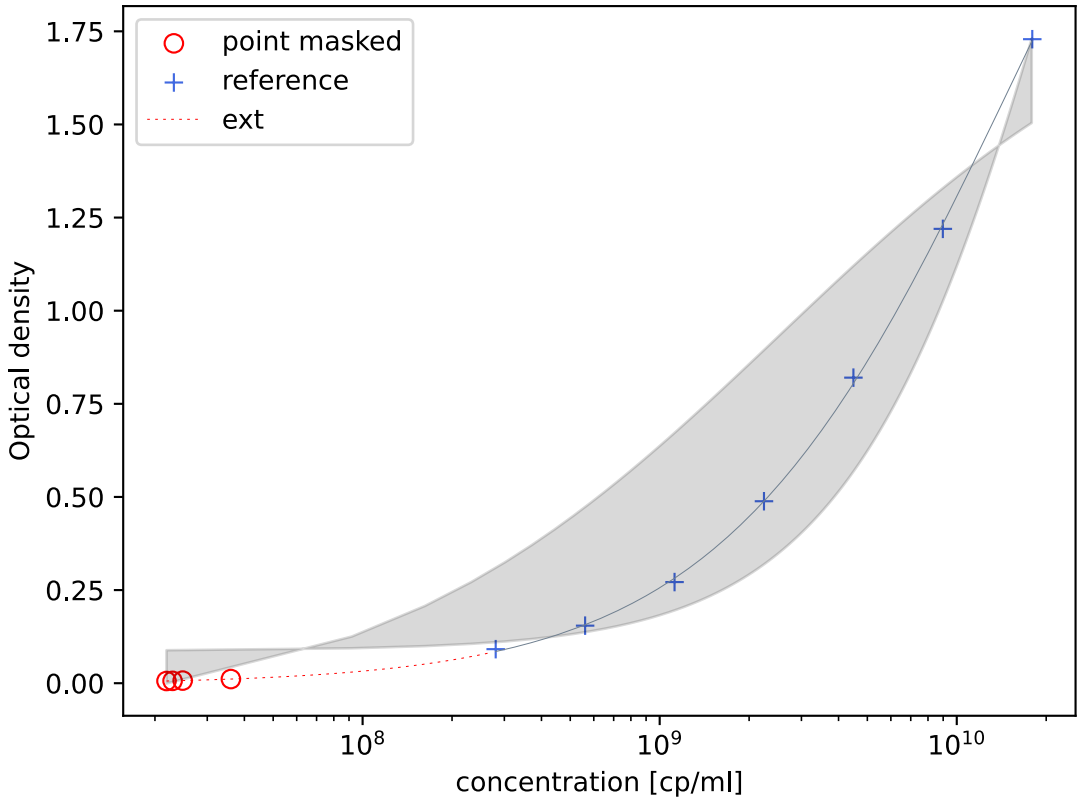
CV = 3.8 [%]
mean = 1.978e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 3;>ULOQ;Measured OD 1.831e+0 > 1.729e+0



Sample: sample ‘s’ 5

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘F’, 1)	0.0111	1	3.60271e+07	<LOQ
(‘F’, 2)	0.007	2	4.95895e+07	<LOQ
(‘F’, 3)	0.0063	4	9.17136e+07	<LOQ
(‘F’, 4)	0.0059	8	1.74957e+08	<LOQ

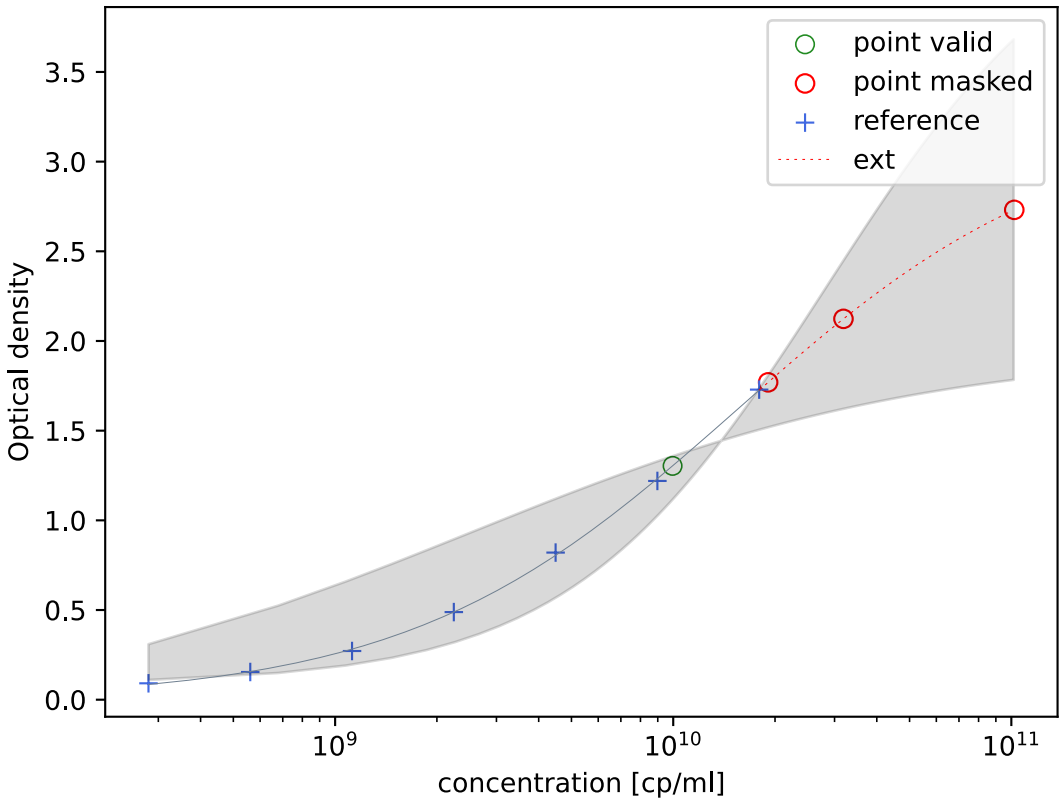
CV = nan [%]
mean = nan [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 0;<LOQ;Measured OD 1.110e-2 < 9.140e-2
info: <2.8053e+08



Sample: sample ‘s’ 6

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘G’, 1)	2.7311	1	1.02019e+11	>ULOQ
(‘G’, 2)	2.1234	2	6.37555e+10	>ULOQ
(‘G’, 3)	1.7694	4	7.63313e+10	>ULOQ
(‘G’, 4)	1.3036	8	7.96492e+10	

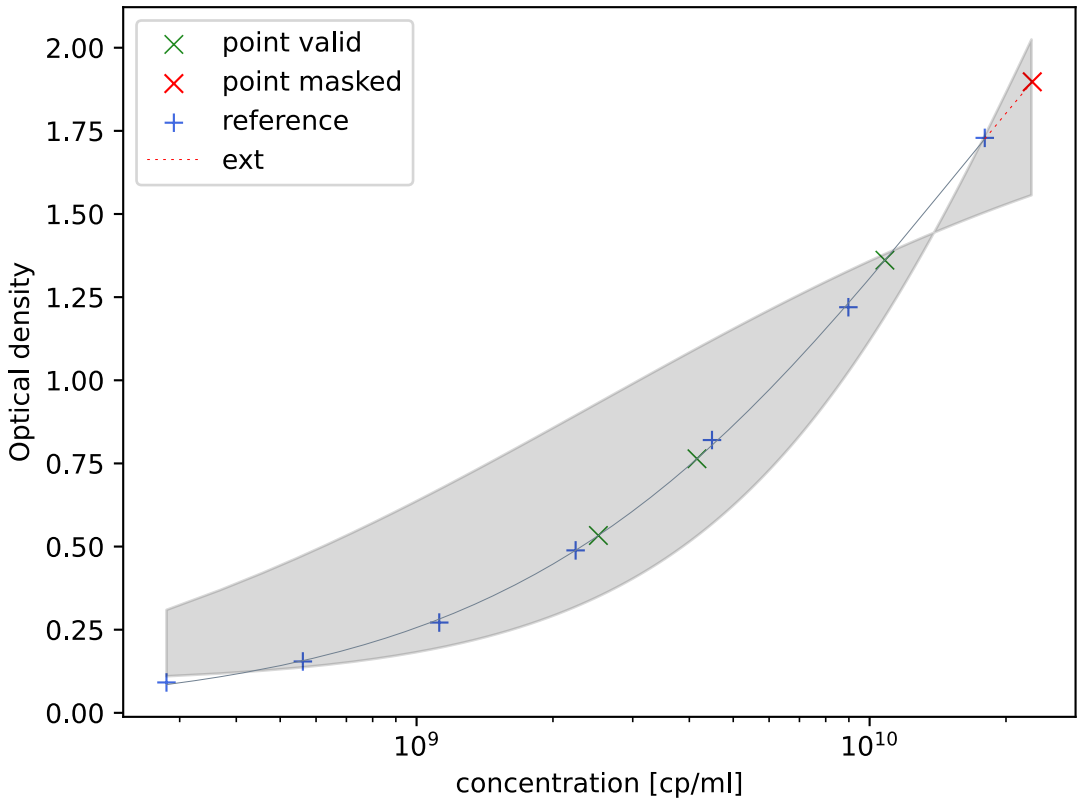
CV = nan [%]
mean = 7.965e+10 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;>ULOQ;Measured OD 2.731e+0 > 1.729e+0
info: 1 valid point



Sample: sample ‘s’ 7

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘H’, 1)	1.8975	1	2.28575e+10	>ULOQ
(‘H’, 2)	1.3611	2	2.16163e+10	
(‘H’, 3)	0.764	4	1.66335e+10	
(‘H’, 4)	0.5333	8	2.01564e+10	

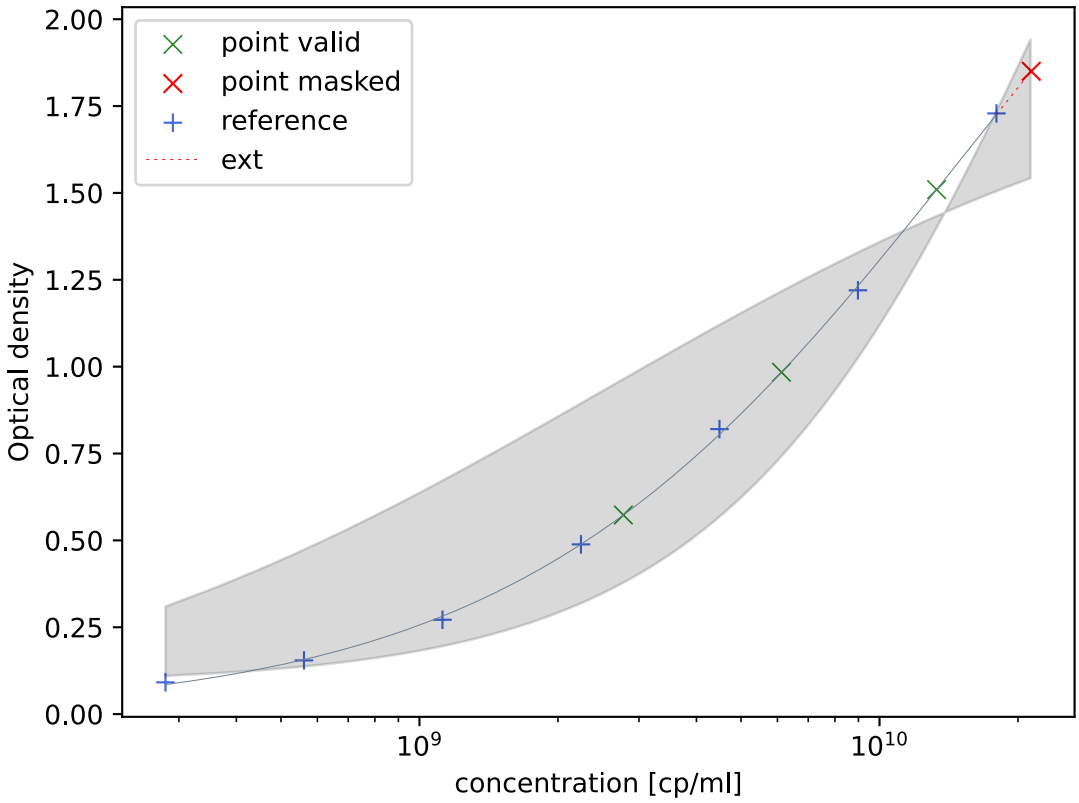
CV = 13.2 [%]
mean = 1.947e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 3;>ULOQ;Measured OD 1.897e+0 > 1.729e+0



Sample: sample ‘s’ 8

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘B’, 5)	1.8502	1	2.1374e+10	>ULOQ
(‘B’, 6)	1.5096	2	2.66208e+10	
(‘B’, 7)	0.9839	4	2.44933e+10	
(‘B’, 8)	0.573	8	2.22013e+10	

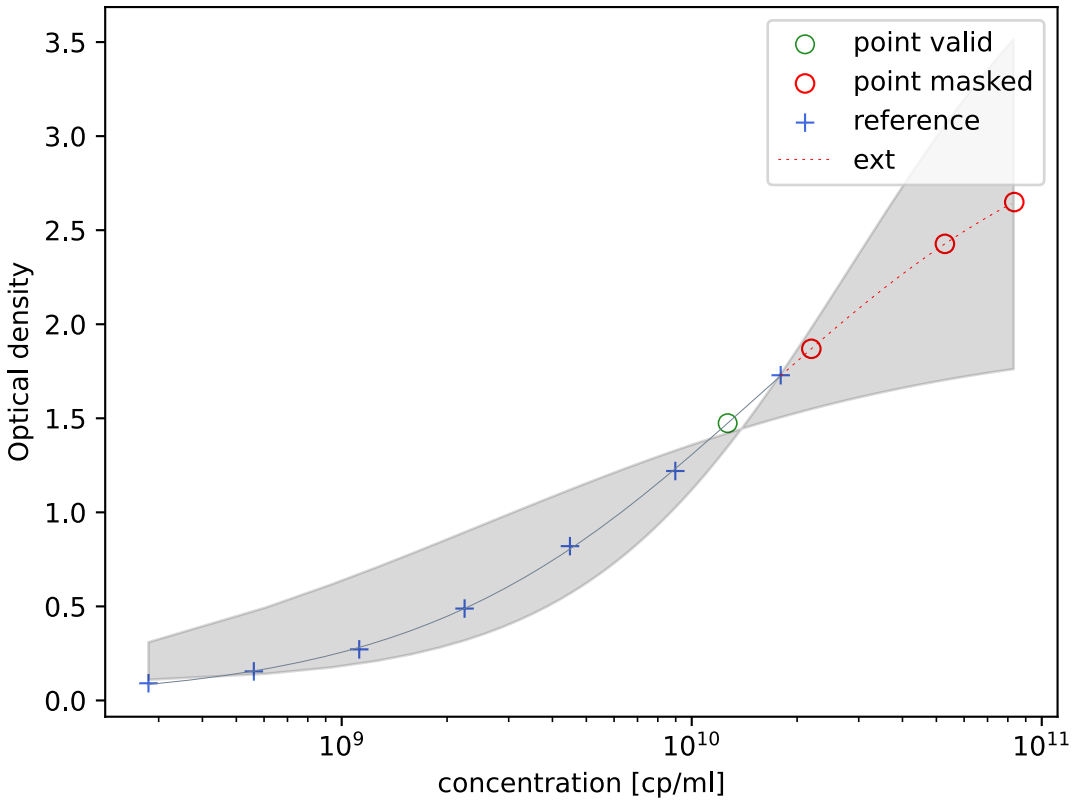
CV = 9.04 [%]
mean = 2.444e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 3;>ULOQ;Measured OD 1.850e+0 > 1.729e+0



Sample: sample ‘s’ 9

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘C’, 5)	2.6495	1	8.34618e+10	>ULOQ
(‘C’, 6)	2.4273	2	1.05763e+11	>ULOQ
(‘C’, 7)	1.8694	4	8.78501e+10	>ULOQ
(‘C’, 8)	1.474	8	1.01335e+11	

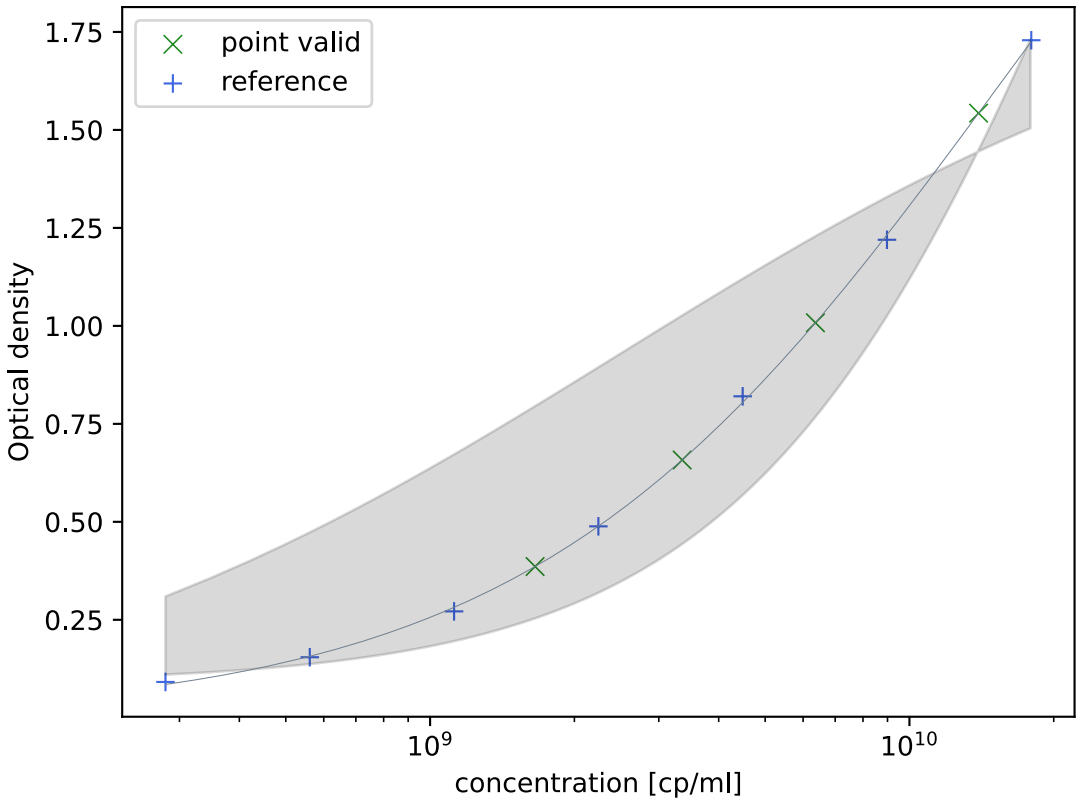
CV = nan [%]
mean = 1.013e+11 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;>ULOQ;Measured OD 2.650e+0 > 1.729e+0
info: 1 valid point



Sample: sample ‘s’ 10

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘D’, 5)	1.5428	1	1.39381e+10	
(‘D’, 6)	1.0079	2	1.27329e+10	
(‘D’, 7)	0.6578	4	1.34263e+10	
(‘D’, 8)	0.3859	8	1.32481e+10	

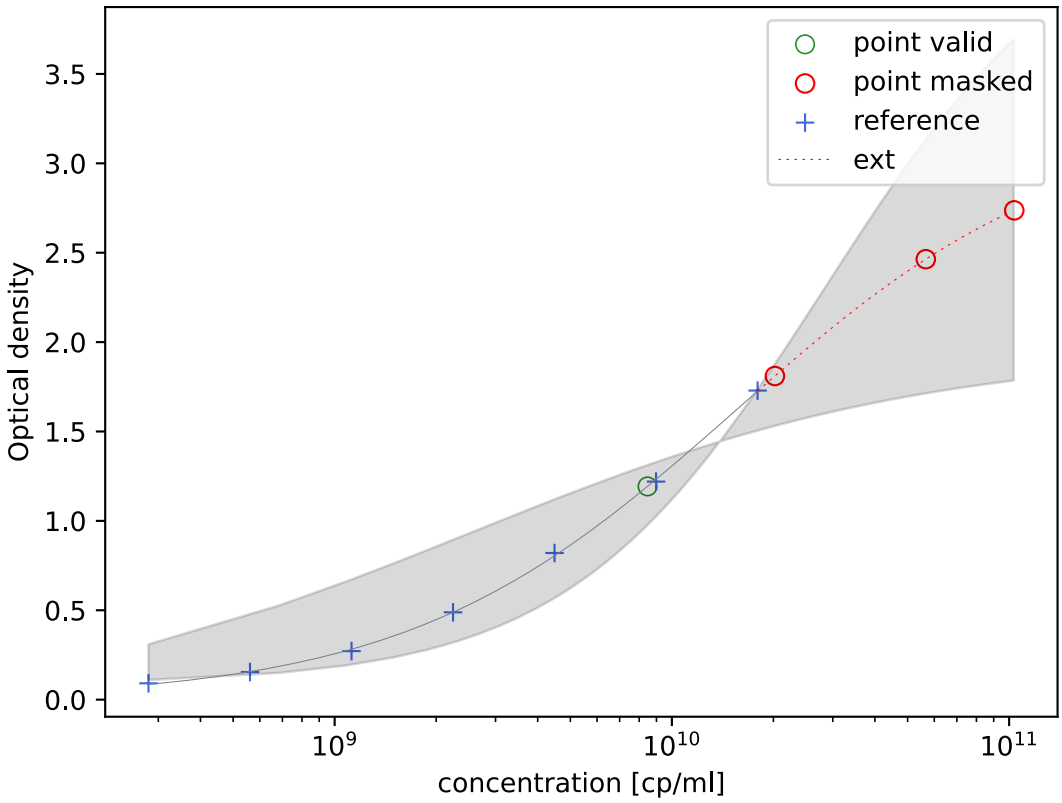
CV = 3.73 [%]
mean = 1.334e+10 [cp/ml]
valid = True



Sample: sample ‘s’ 11

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘E’, 5)	2.7369	1	1.03585e+11	>ULOQ
(‘E’, 6)	2.4638	2	1.13234e+11	>ULOQ
(‘E’, 7)	1.8103	4	8.08268e+10	>ULOQ
(‘E’, 8)	1.1928	8	6.77513e+10	

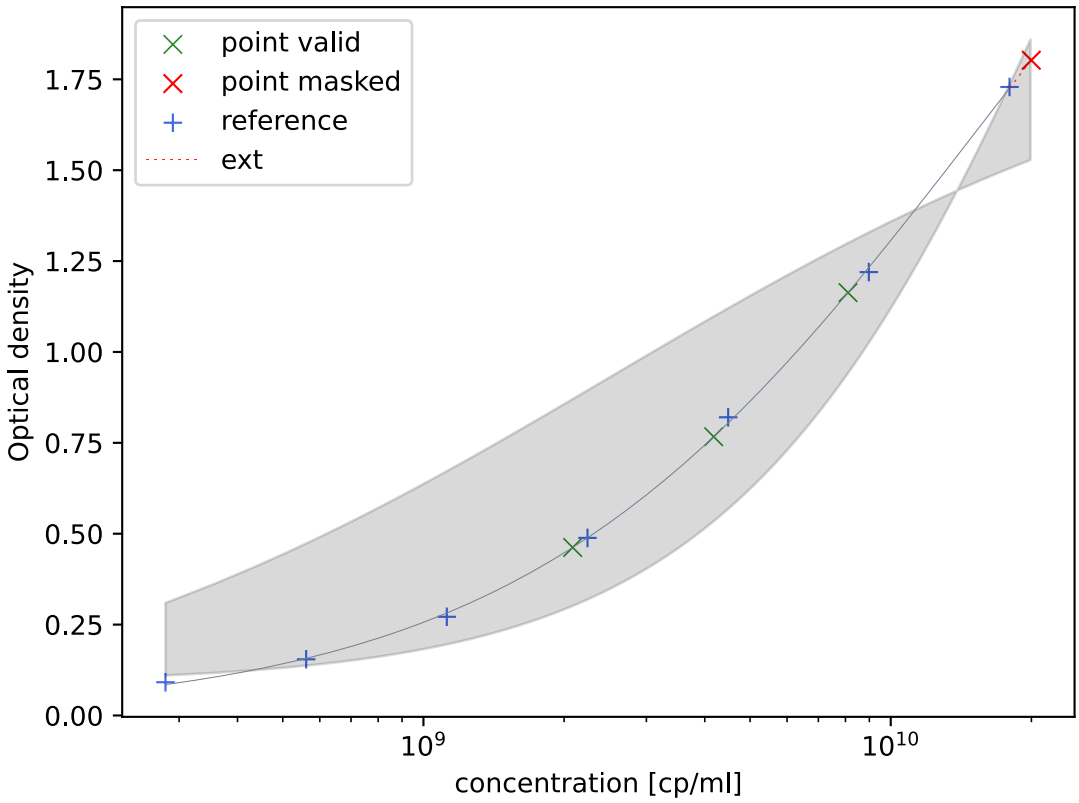
CV = nan [%]
mean = 6.775e+10 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;>ULOQ;Measured OD 2.737e+0 > 1.729e+0
info: 1 valid point



Sample: sample ‘s’ 12

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘F’, 5)	1.8025	1	1.99869e+10	>ULOQ
(‘F’, 6)	1.1632	2	1.62053e+10	
(‘F’, 7)	0.7667	4	1.67196e+10	
(‘F’, 8)	0.4621	8	1.66888e+10	

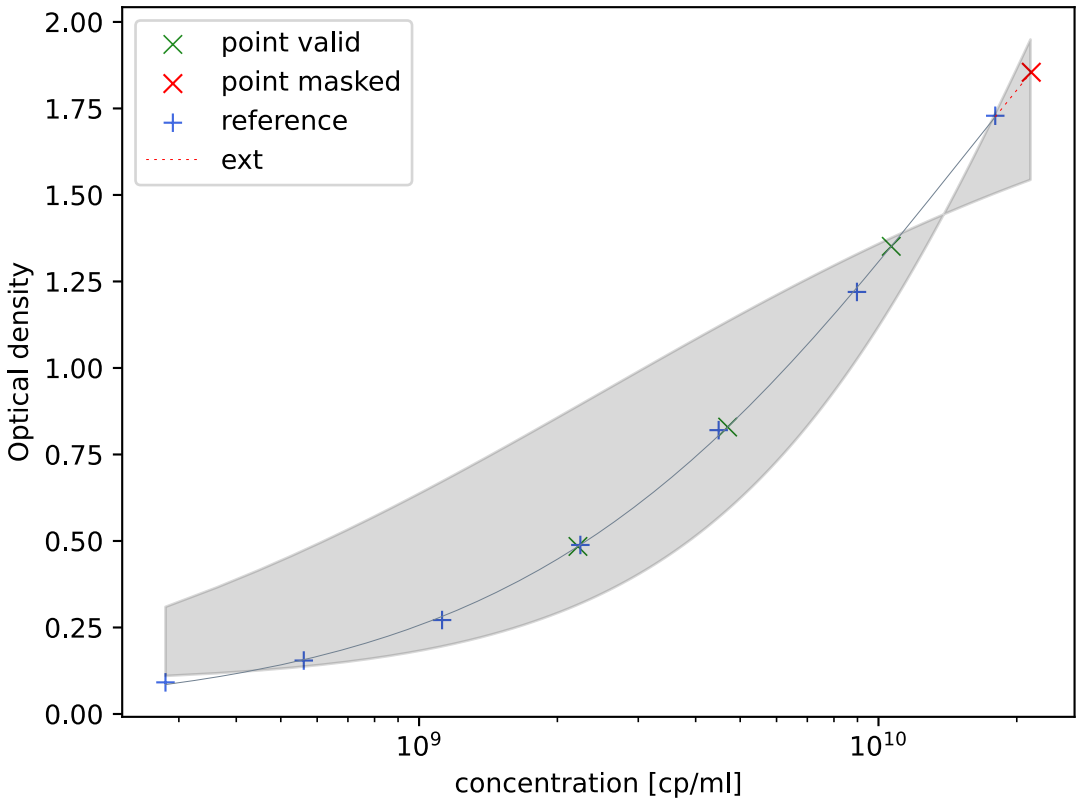
CV = 1.74 [%]
mean = 1.654e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 3;>ULOQ;Measured OD 1.802e+0 > 1.729e+0



Sample: sample ‘s’ 13

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘G’, 5)	1.8546	1	2.15073e+10	>ULOQ
(‘G’, 6)	1.3515	2	2.13235e+10	
(‘G’, 7)	0.8292	4	1.87807e+10	
(‘G’, 8)	0.4842	8	1.77384e+10	

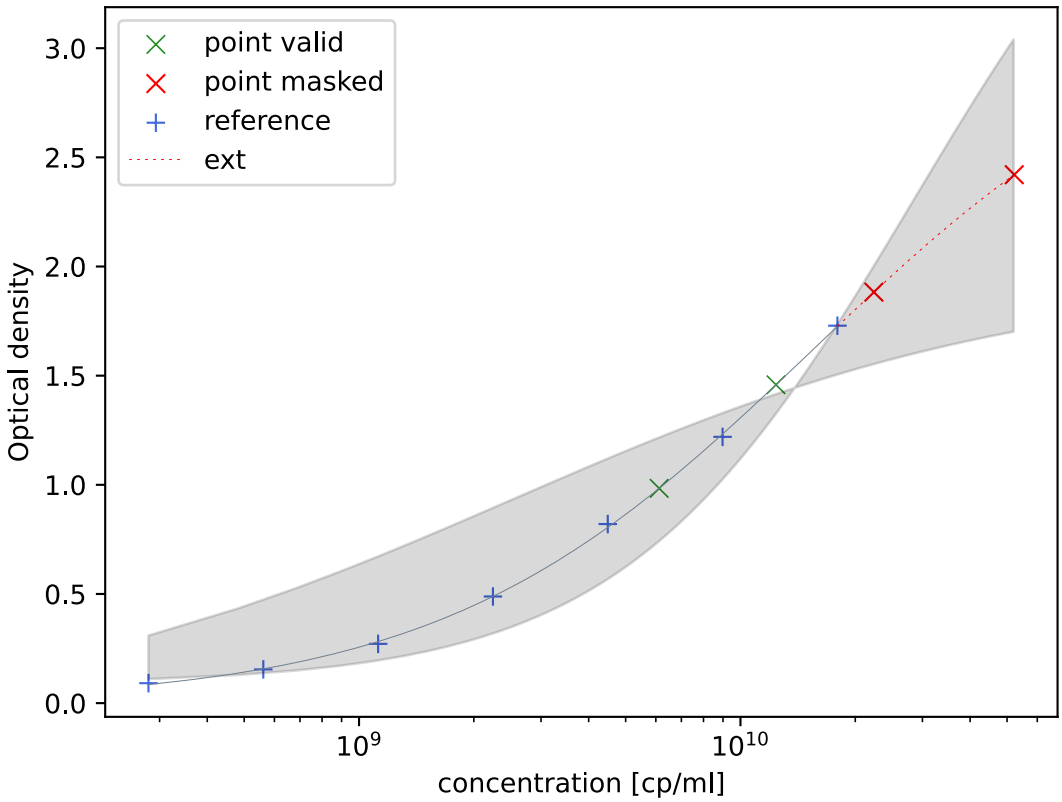
CV = 9.56 [%]
mean = 1.928e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 3;>ULOQ;Measured OD 1.855e+0 > 1.729e+0



Sample: sample ‘s’ 14

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘H’, 5)	2.4205	1	5.22251e+10	>ULOQ
(‘H’, 6)	1.8826	2	4.47557e+10	>ULOQ
(‘H’, 7)	1.4583	4	4.95693e+10	
(‘H’, 8)	0.9838	8	4.89786e+10	

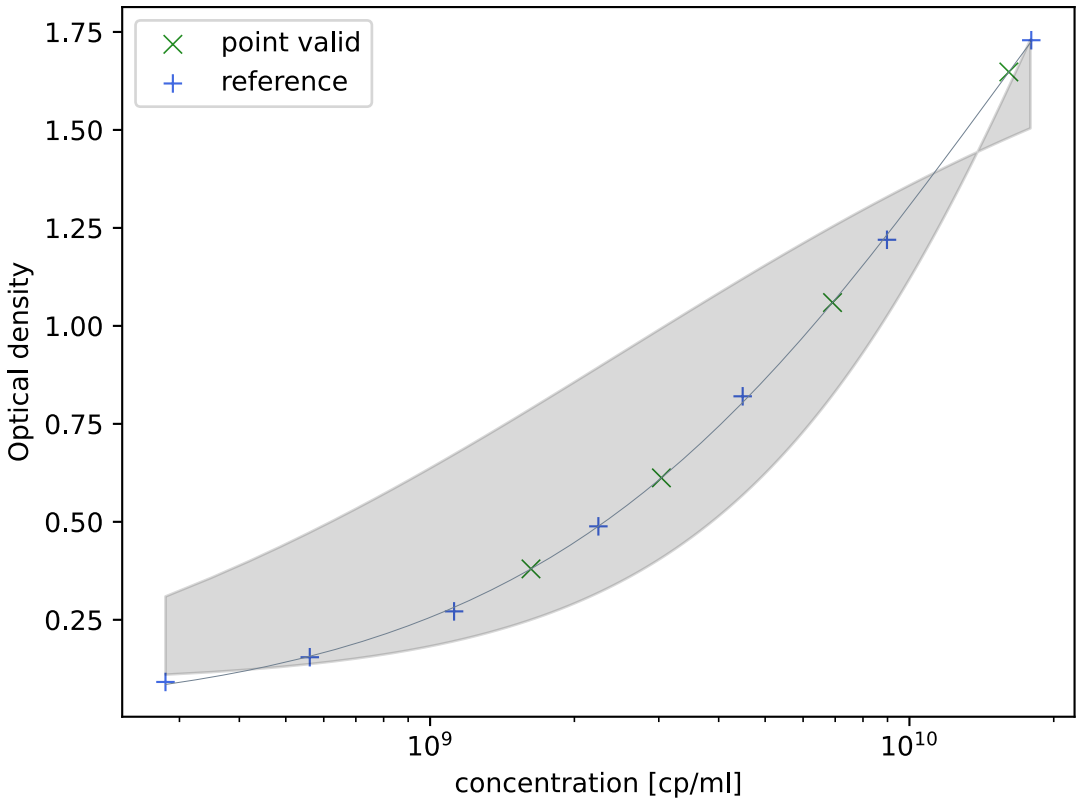
CV = 0.848 [%]
mean = 4.927e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 2;>ULOQ;Measured OD 2.420e+0 > 1.729e+0



Sample: sample ‘s’ 15

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘B’, 9)	1.6479	1	1.61207e+10	
(‘B’, 10)	1.0595	2	1.38219e+10	
(‘B’, 11)	0.6122	4	1.21511e+10	
(‘B’, 12)	0.3799	8	1.29887e+10	

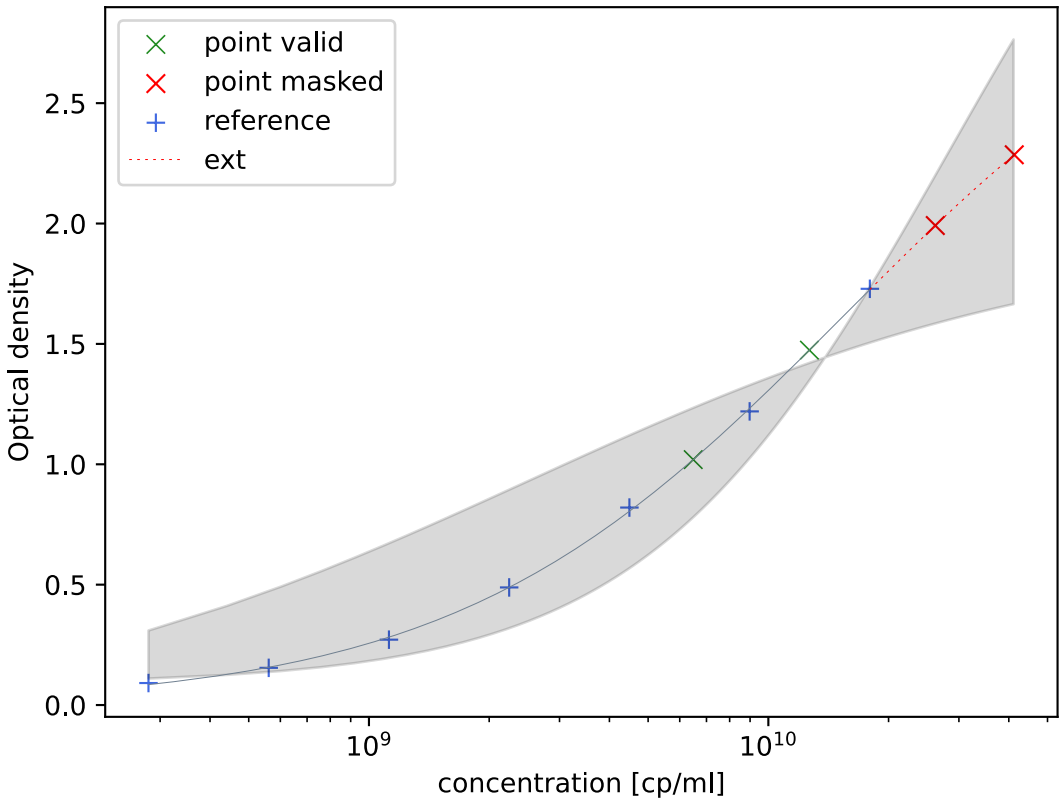
CV = 12.4 [%]
mean = 1.377e+10 [cp/ml]
valid = True



Sample: sample ‘s’ 16

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘C’, 9)	2.2856	1	4.12812e+10	>ULOQ
(‘C’, 10)	1.9917	2	5.23675e+10	>ULOQ
(‘C’, 11)	1.4742	4	5.06816e+10	
(‘C’, 12)	1.0194	8	5.18816e+10	

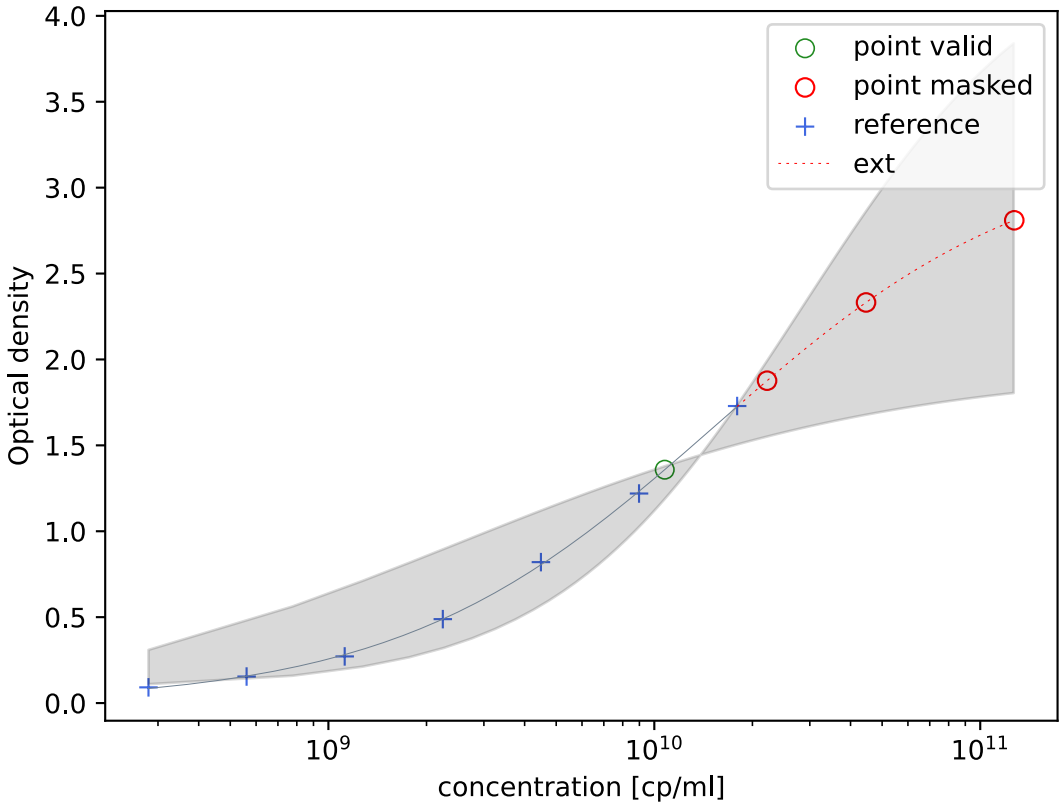
CV = 1.65 [%]
mean = 5.128e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 2;>ULOQ;Measured OD 2.286e+0 > 1.729e+0



Sample: sample ‘s’ 17

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘D’, 9)	2.8099	1	1.2719e+11	>ULOQ
(‘D’, 10)	2.3318	2	8.92662e+10	>ULOQ
(‘D’, 11)	1.8764	4	8.87267e+10	>ULOQ
(‘D’, 12)	1.3583	8	8.61223e+10	

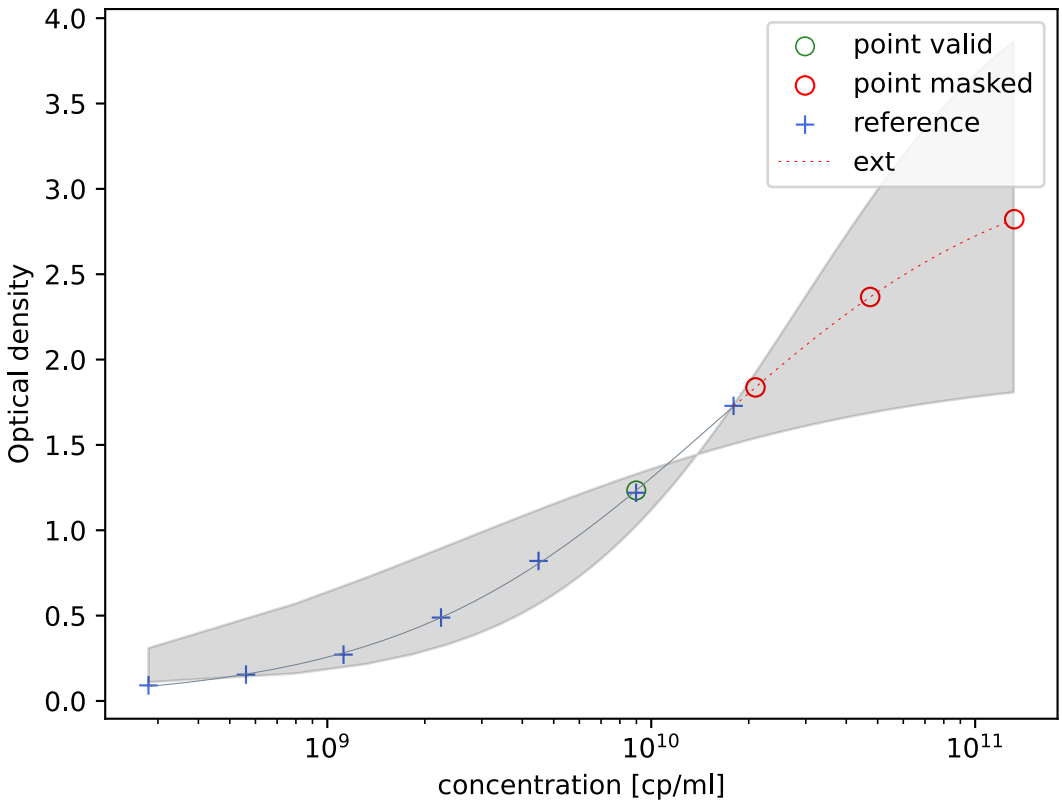
CV = nan [%]
mean = 8.612e+10 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;>ULOQ;Measured OD 2.810e+0 > 1.729e+0
info: 1 valid point



Sample: sample ‘s’ 18

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘E’, 9)	2.8222	1	1.32041e+11	>ULOQ
(‘E’, 10)	2.3666	2	9.48256e+10	>ULOQ
(‘E’, 11)	1.837	4	8.39187e+10	>ULOQ
(‘E’, 12)	1.2332	8	7.19134e+10	

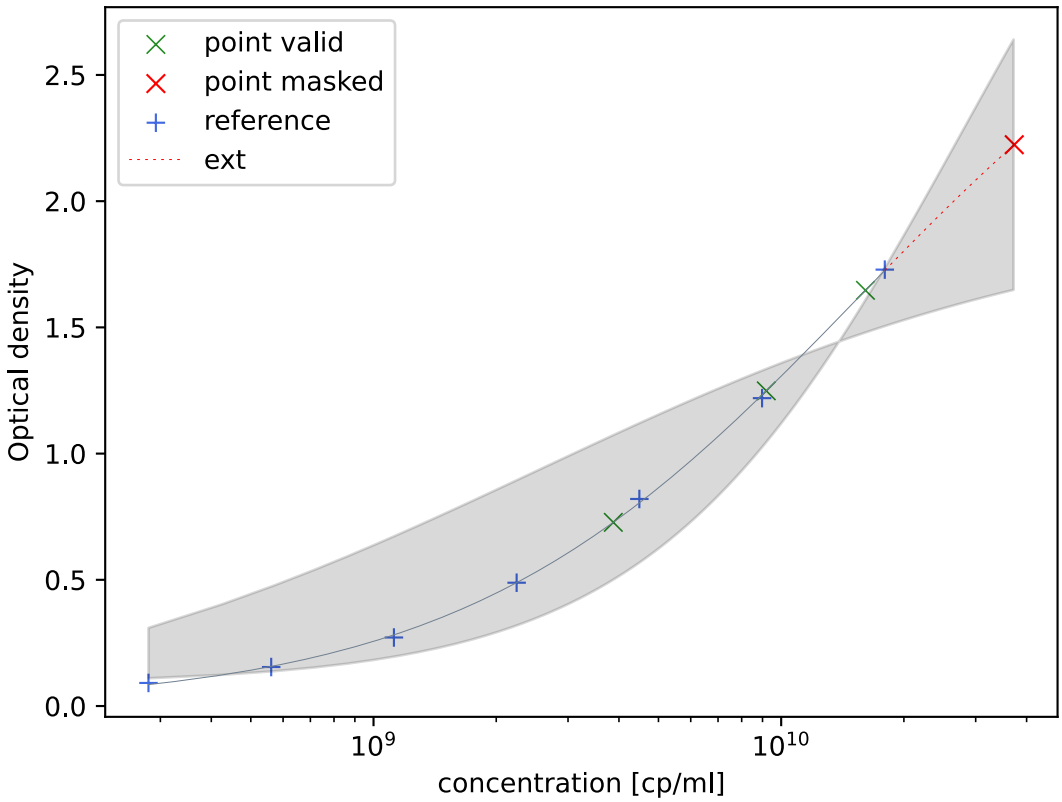
CV = nan [%]
mean = 7.191e+10 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;>ULOQ;Measured OD 2.822e+0 > 1.729e+0
info: 1 valid point



Sample: sample ‘s’ 19

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘F’, 9)	2.2237	1	3.73066e+10	>ULOQ
(‘F’, 10)	1.6468	2	3.21923e+10	
(‘F’, 11)	1.2486	4	3.67758e+10	
(‘F’, 12)	0.7277	8	3.09967e+10	

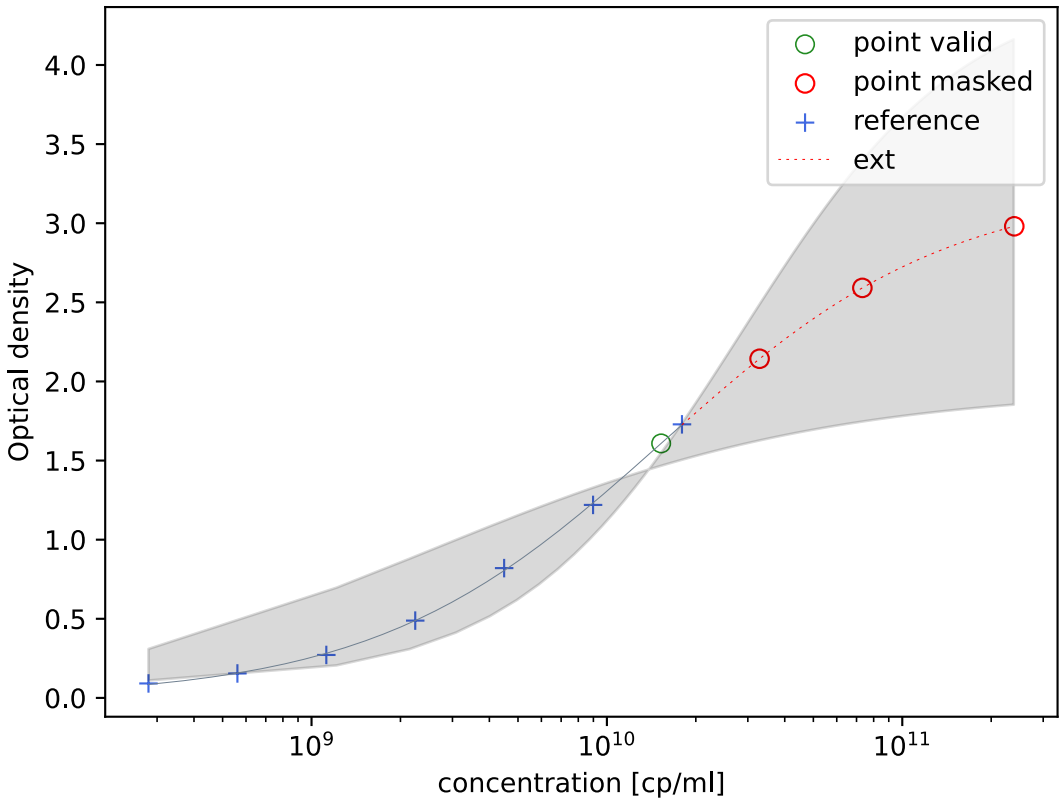
CV = 9.15 [%]
mean = 3.332e+10 [cp/ml]
valid = True
note: Reduced number of sample points. Measured 4, valid 3;>ULOQ;Measured OD 2.224e+0 > 1.729e+0



Sample: sample ‘s’ 20

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘G’, 9)	2.9805	1	2.39426e+11	>ULOQ
(‘G’, 10)	2.5913	2	1.4653e+11	>ULOQ
(‘G’, 11)	2.1435	4	1.31516e+11	>ULOQ
(‘G’, 12)	1.6084	8	1.22106e+11	

CV = nan [%]
mean = 1.221e+11 [cp/ml]
valid = False
note: Not enough valid sample points. Required 2, available 1;>ULOQ;Measured OD 2.981e+0 > 1.729e+0
info: 1 valid point



Sample: sample ‘s’ 21

Well	OD_delta	plate_layout_dil	concentration	mask_reason
(‘H’, 9)	1.493	1	1.30066e+10	
(‘H’, 10)	1.167	2	1.6298e+10	
(‘H’, 11)	0.6875	4	1.42889e+10	
(‘H’, 12)	0.4388	8	1.56078e+10	

CV = 9.85 [%]
mean = 1.48e+10 [cp/ml]
valid = True