

Method Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\
 Method File : 8270-BM011623.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Tue Jan 17 03:06:05 2023
 Response Via : Initial Calibration

Calibration Files

2.5 =BM038450.D 5 =BM038451.D 10 =BM038452.D 20 =BM038453.D 40 =BM038454.D 50 =BM038455.D 60 =BM038456.D 80 =BM038457.D

Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD

1) I 1,4-Dichlorobenzen...	-----ISTD-----									
2) 1,4-Dioxane	0.712	0.659	0.628	0.558	0.567	0.550	0.521	0.599	11.48	
3) Pyridine	1.819	1.812	1.758	1.747	1.711	1.654	1.632	1.733	4.17	
4) n-Nitrosodimet...	1.165	1.098	1.059	1.013	0.987	0.945	0.911	1.026	8.65	
5) S 2-Fluorophenol	1.380	1.430	1.305	1.240	1.316	1.241	1.266	1.311	5.48	
6) Aniline	2.361	1.981	2.247	2.073	2.079	2.070	2.039	2.121	6.28	
7) S Phenol-d6	1.897	1.558	1.761	1.670	1.621	1.635	1.616	1.680	6.80	
8) 2-Chlorophenol	1.399	1.264	1.307	1.273	1.285	1.293	1.266	1.298	3.64	
9) Benzaldehyde		1.237	1.339	1.112	0.992	0.935		1.123	14.91	
10) C Phenol	1.942	1.698	1.868	1.741	1.672	1.689	1.642	1.750	6.40	
11) bis(2-Chloroet...	1.667	1.332	1.529	1.376	1.358	1.351	1.316	1.418	9.20	
12) 1,3-Dichlorobe...	1.444	1.391	1.413	1.356	1.386	1.400	1.345	1.391	2.41	
13) C 1,4-Dichlorobe...	1.464	1.373	1.425	1.377	1.390	1.407	1.357	1.399	2.60	
14) 1,2-Dichlorobe...	1.446	1.311	1.370	1.345	1.362	1.388	1.354	1.368	3.06	
15) Benzyl Alcohol	1.230	1.223	1.352	1.399	1.386	1.421	1.406	1.345	6.24	
16) 2,2'-oxybis(1-...	2.087	1.943	2.065	1.999	1.942	1.943	1.864	1.977	3.95	
17) 2-Methylphenol	1.170	1.129	1.161	1.205	1.191	1.221	1.198	1.182	2.64	
18) Hexachloroethane	0.546	0.564	0.578	0.580	0.572	0.595	0.575	0.573	2.64	
19) P n-Nitroso-di-n...	1.031	1.204	1.139	1.277	1.274	1.263	1.287	1.279	1.219	7.50
20) 3+4-Methylphenols		1.507	1.465	1.625	1.621	1.611	1.645	1.636	1.587	4.48
21) I Naphthalene-d8	-----ISTD-----									
22) Acetophenone	0.580	0.566	0.591	0.583	0.613	0.595	0.609	0.591	2.79	
23) S Nitrobenzene-d5	0.462	0.458	0.489	0.490	0.523	0.507	0.507	0.491	4.89	
24) Nitrobenzene	0.511	0.521	0.516	0.510	0.537	0.521	0.515	0.519	1.80	
25) Isophorone	0.789	0.798	0.866	0.870	0.920	0.943	0.901	0.869	6.69	
26) C 2-Nitrophenol	0.149	0.157	0.178	0.184	0.198	0.206	0.202	0.182	12.32	
27) 2,4-Dimethylph...	0.281	0.286	0.306	0.308	0.325	0.336	0.328	0.310	6.78	
28) bis(2-Chloroet...	0.454	0.457	0.496	0.488	0.509	0.519	0.500	0.489	5.14	
29) C 2,4-Dichloroph...	0.297	0.319	0.334	0.343	0.367	0.367	0.371	0.343	8.21	
30) 1,2,4-Trichlor...	0.387	0.376	0.383	0.388	0.416	0.411	0.412	0.396	4.10	
31) Naphthalene	1.027	1.004	1.035	1.039	1.112	1.092	1.110	1.060	4.14	
32) Benzoic acid		0.174	0.207	0.233	0.262	0.270	0.268	0.236	16.49	
33) 4-Chloroaniline	0.404	0.415	0.461	0.477	0.499	0.494	0.506	0.465	8.84	
34) C Hexachlorobuta...	0.287	0.265	0.268	0.268	0.289	0.283	0.285	0.278	3.66	
35) Caprolactam	0.078	0.083	0.095	0.100	0.106	0.106	0.108	0.097	12.28	
36) C 4-Chloro-3-met...	0.325	0.328	0.376	0.381	0.403	0.396	0.405	0.373	9.04	
37) 2-Methylnaphth...	0.709	0.697	0.762	0.768	0.821	0.821	0.848	0.775	7.48	
38) 1-Methylnaphth...	0.640	0.664	0.700	0.733	0.780	0.767	0.809	0.728	8.57	

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39) I	Acenaphthene-d10	-----ISTD-----									
40)	1,2,4,5-Tetrac...	0.698	0.686	0.724	0.741	0.800	0.793	0.797	0.749	6.46	
41) P	Hexachlorocycl...	0.351	0.356	0.400	0.435	0.472	0.480	0.485	0.426	13.47	
42) S	2,4,6-Tribromo...	0.284	0.277	0.324	0.351	0.371	0.377	0.383	0.338	13.03	
43) C	2,4,6-Trichlor...	0.407	0.418	0.453	0.472	0.523	0.518	0.521	0.473	10.46	
44)	2,4,5-Trichlor...	0.487	0.501	0.527	0.570	0.608	0.605	0.607	0.558	9.41	
45) S	2-Fluorobiphenyl	1.458	1.438	1.517	1.578	1.724	1.744	1.766	1.604	8.73	
46)	1,1'-Biphenyl	1.450	1.425	1.494	1.524	1.648	1.638	1.683	1.552	6.68	
47)	2-Chloronaphth...	1.131	1.120	1.196	1.213	1.296	1.289	1.304	1.221	6.37	
48)	2-Nitroaniline	0.323	0.371	0.430	0.461	0.494	0.488	0.479	0.435	15.04	
49)	Acenaphthylene	1.743	1.751	1.874	1.920	2.050	2.047	2.093	1.925	7.47	
50)	Dimethylphthalate	1.535	1.472	1.601	1.609	1.713	1.705	1.712	1.621	5.85	
51)	2,6-Dinitrotol...	0.279	0.287	0.327	0.339	0.361	0.356	0.360	0.330	10.45	
52) C	Acenaphthene	1.052	1.081	1.142	1.165	1.239	1.238	1.274	1.170	7.22	
53)	3-Nitroaniline	0.247	0.270	0.325	0.349	0.367	0.372	0.371	0.329	15.52	
54) P	2,4-Dinitrophenol		0.156	0.208	0.235	0.251	0.260	0.268	0.230	18.23	
55)	Dibenzofuran	1.829	1.833	1.939	1.987	2.111	2.092	2.153	1.992	6.64	
56) P	4-Nitrophenol		0.196	0.258	0.281	0.296	0.303	0.303	0.273	15.20	
57)	2,4-Dinitrotol...	0.359	0.386	0.442	0.478	0.514	0.512	0.518	0.458	14.16	
58)	Fluorene	1.436	1.436	1.595	1.671	1.809	1.820	1.884	1.665	11.04	
59)	2,3,4,6-Tetrac...	0.433	0.432	0.489	0.502	0.534	0.534	0.539	0.495	9.37	
60)	Diethylphthalate	1.570	1.496	1.654	1.667	1.752	1.737	1.763	1.663	6.02	
61)	4-Chlorophenyl...	0.814	0.804	0.878	0.927	0.983	0.991	0.998	0.914	9.08	
62)	4-Nitroaniline	0.233	0.261	0.356	0.369	0.396	0.383	0.398	0.342	19.62	
63)	Azobenzene	1.684	1.685	1.878	1.863	1.944	1.897	1.856	1.830	5.65	
64) I	Phenanthrene-d10	-----ISTD-----									
65)	4,6-Dinitro-2-...		0.102	0.125	0.137	0.148	0.147	0.155	0.136	14.46	
66) c	n-Nitrosodiphe...	0.533	0.515	0.559	0.584	0.627	0.629	0.660	0.587	9.23	
67)	4-Bromophenyl-...	0.212	0.203	0.215	0.234	0.246	0.252	0.257	0.231	9.33	
68)	Hexachlorobenzene	0.242	0.233	0.245	0.259	0.275	0.277	0.283	0.259	7.59	
69)	Atrazine	0.192	0.185	0.202	0.210	0.218	0.222	0.223	0.208	7.24	
70) C	Pentachlorophenol	0.153	0.158	0.183	0.196	0.206	0.212	0.215	0.189	13.43	
71)	Phenanthrene	1.008	1.010	1.071	1.099	1.161	1.182	1.214	1.106	7.42	
72)	Anthracene	1.031	0.989	1.111	1.131	1.212	1.228	1.259	1.137	8.97	
73)	Carbazole	0.869	0.900	0.978	0.997	1.059	1.063	1.096	0.994	8.62	
74)	Di-n-butylphth...	1.023	1.029	1.144	1.222	1.253	1.275	1.321	1.181	10.05	
75) C	Fluoranthene	1.226	1.237	1.333	1.422	1.489	1.492	1.539	1.391	9.15	
76) I	Chrysene-d12	-----ISTD-----									
77)	Benzidine	0.394	0.419	0.434	0.446	0.467	0.453	0.455	0.438	5.71	
78)	Pyrene	1.150	1.177	1.291	1.351	1.461	1.438	1.449	1.331	9.74	
79) S	Terphenyl-d14	0.934	0.936	1.059	1.125	1.197	1.156	1.070	1.068	9.60	
80)	Butylbenzylpht...	0.413	0.413	0.473	0.500	0.531	0.524	0.551	0.487	11.47	
81)	Benzo(a)anthra...	1.308	1.320	1.421	1.453	1.546	1.528	1.493	1.438	6.59	
82)	3,3'-Dichlorob...	0.403	0.427	0.472	0.472	0.501	0.485	0.483	0.463	7.59	
83)	Chrysene	1.305	1.327	1.388	1.405	1.473	1.463	1.424	1.398	4.56	
84)	Bis(2-ethylhex...	0.589	0.588	0.685	0.707	0.764	0.764	0.799	0.699	12.14	
85) c	Di-n-octyl pht...	1.100	1.100	1.223	1.236	1.318	1.300	1.337	1.231	7.99	

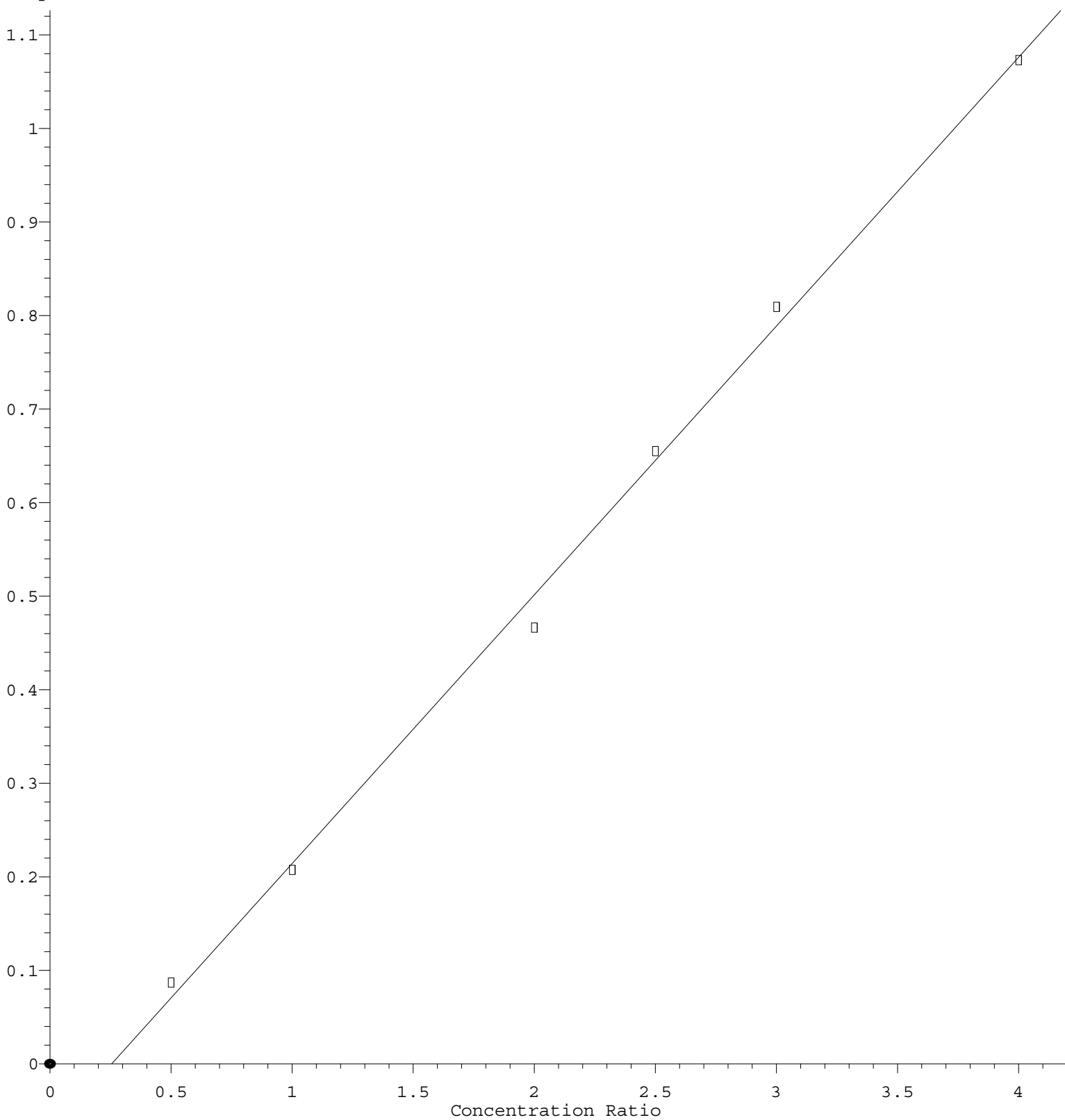
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86) I	Perylene-d12	-----ISTD-----								
87)	Indeno(1,2,3-c...	1.374	1.350	1.423	1.480	1.576	1.578	1.579	1.480	6.75
88)	Benzo(b)fluora...	1.100	1.072	1.194	1.261	1.351	1.346	1.358	1.240	9.76
89)	Benzo(k)fluora...	1.137	1.158	1.271	1.284	1.375	1.391	1.361	1.282	8.01
90) C	Benzo(a)pyrene	1.049	1.086	1.186	1.233	1.323	1.327	1.315	1.217	9.46
91)	Dibenzo(a,h)an...	1.160	1.095	1.207	1.237	1.317	1.339	1.340	1.242	7.65
92)	Benzo(g,h,i)pe...	1.193	1.155	1.198	1.207	1.294	1.285	1.295	1.232	4.67

(#) = Out of Range

Benzoic acid

Response Ratio



$$\text{Response} = 2.875e-001 * \text{Amt} - 7.317e-002$$

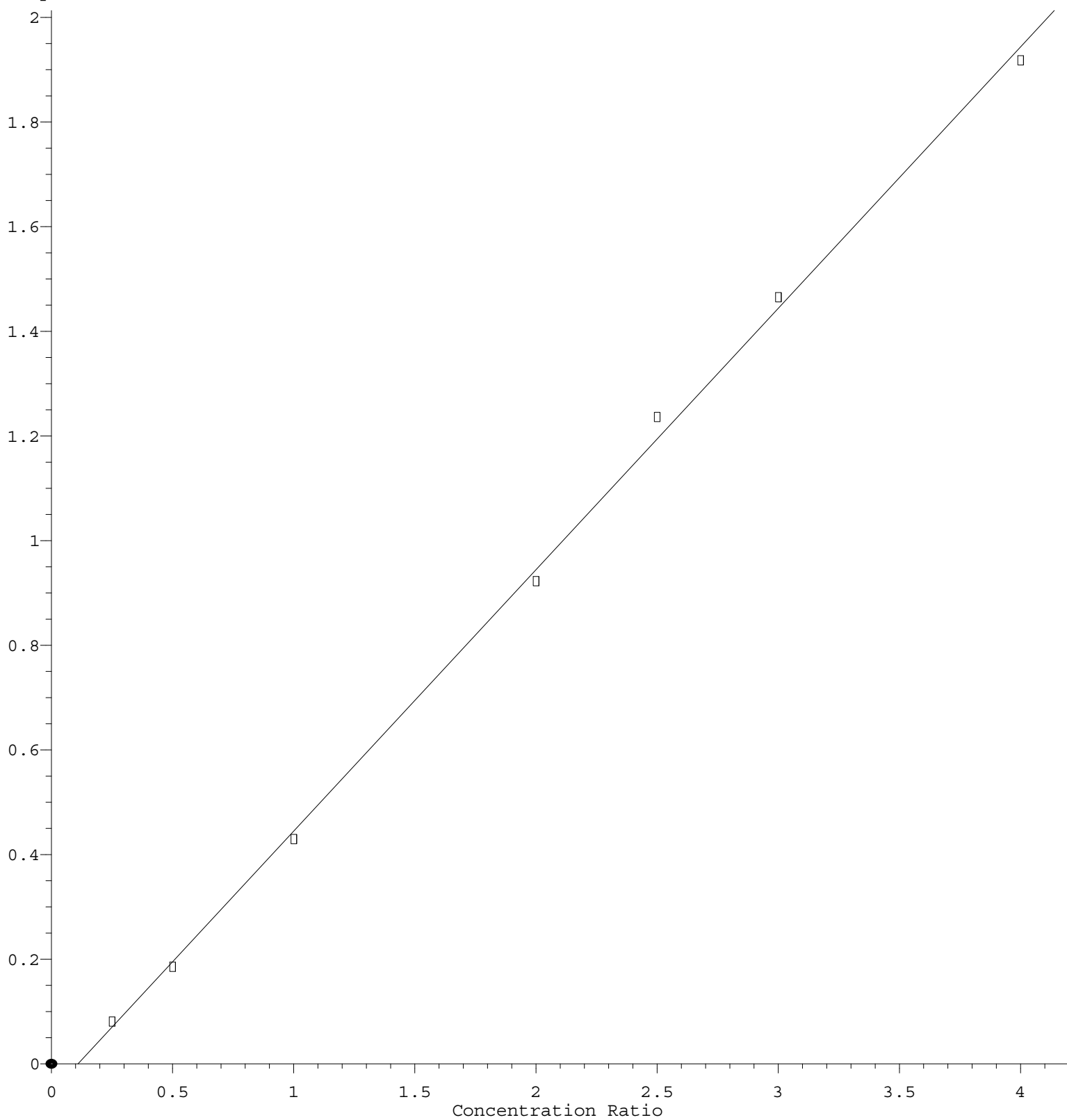
Coef of Det (r^2) = 0.996998 Curve Fit: Linear

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2-Nitroaniline

Response Ratio



$$\text{Response} = 4.997\text{e-}001 * \text{Amt} - 5.486\text{e-}002$$

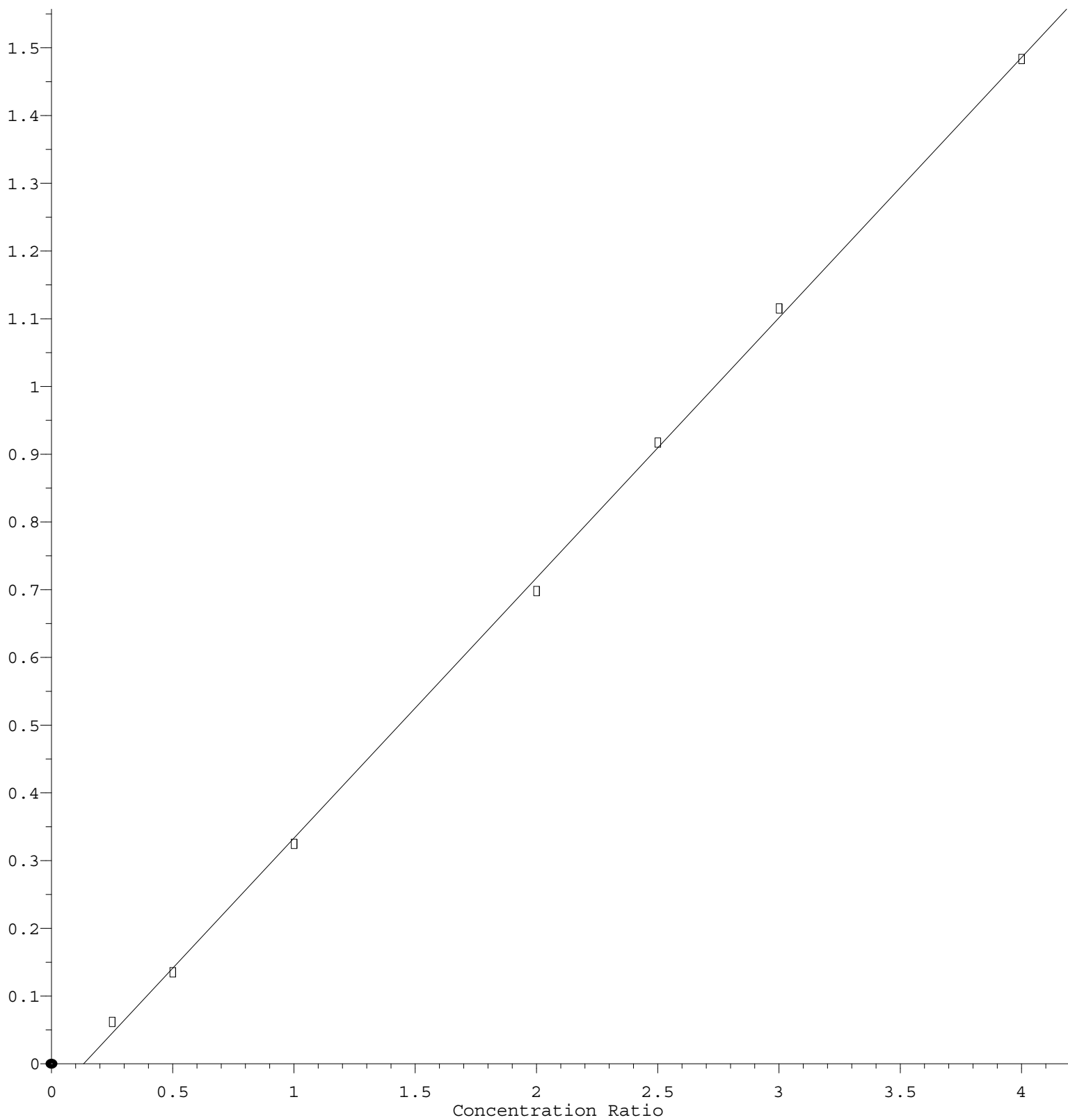
Coef of Det (r^2) = 0.998680 Curve Fit: Linear

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3-Nitroaniline

Response Ratio



$$\text{Response} = 3.843\text{e-}001 * \text{Amt} - 5.093\text{e-}002$$

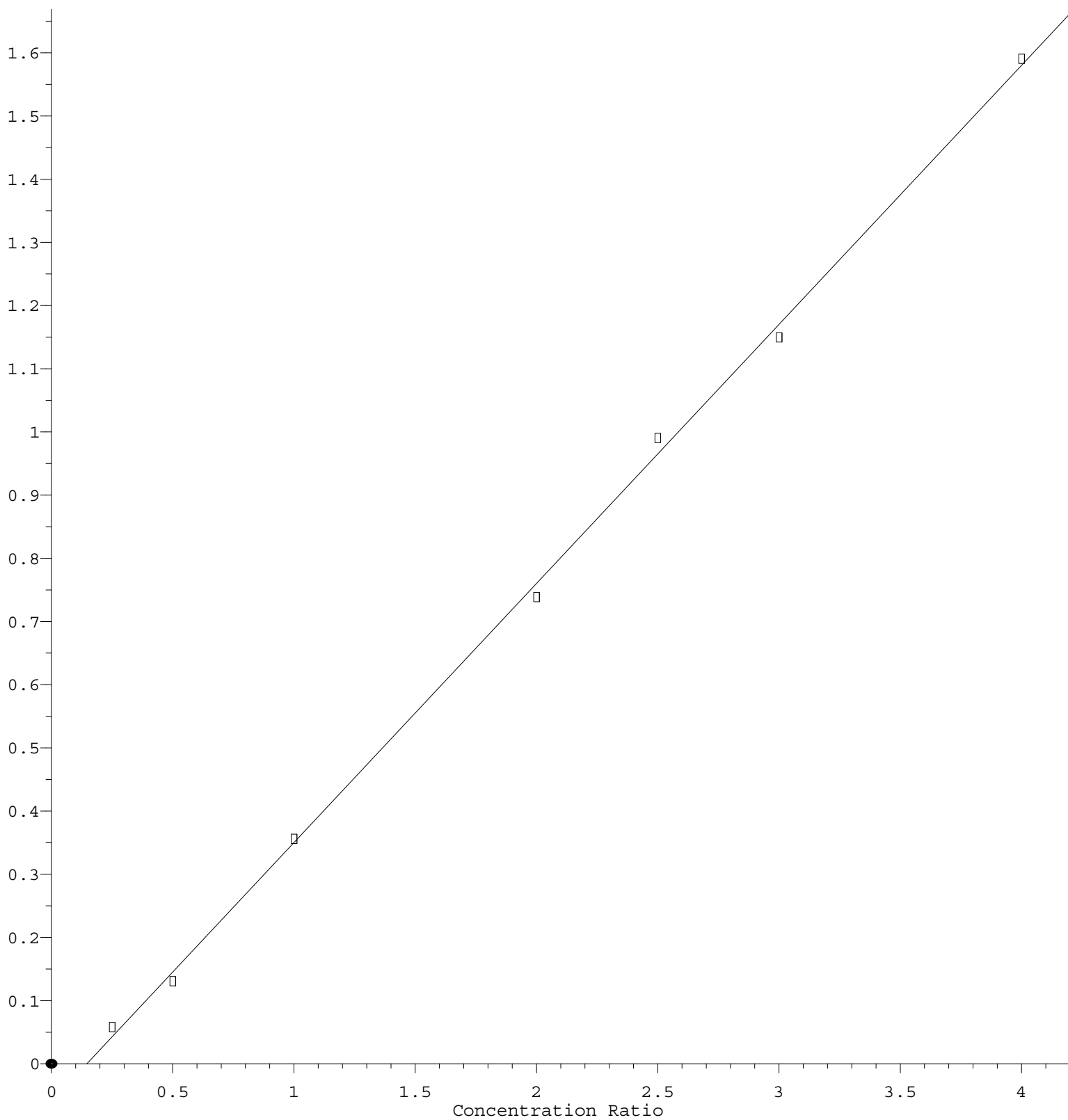
Coef of Det (r^2) = 0.999402 Curve Fit: Linear

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4-Nitroaniline

Response Ratio



$$\text{Response} = 4.101\text{e-}001 * \text{Amt} - 5.998\text{e-}002$$

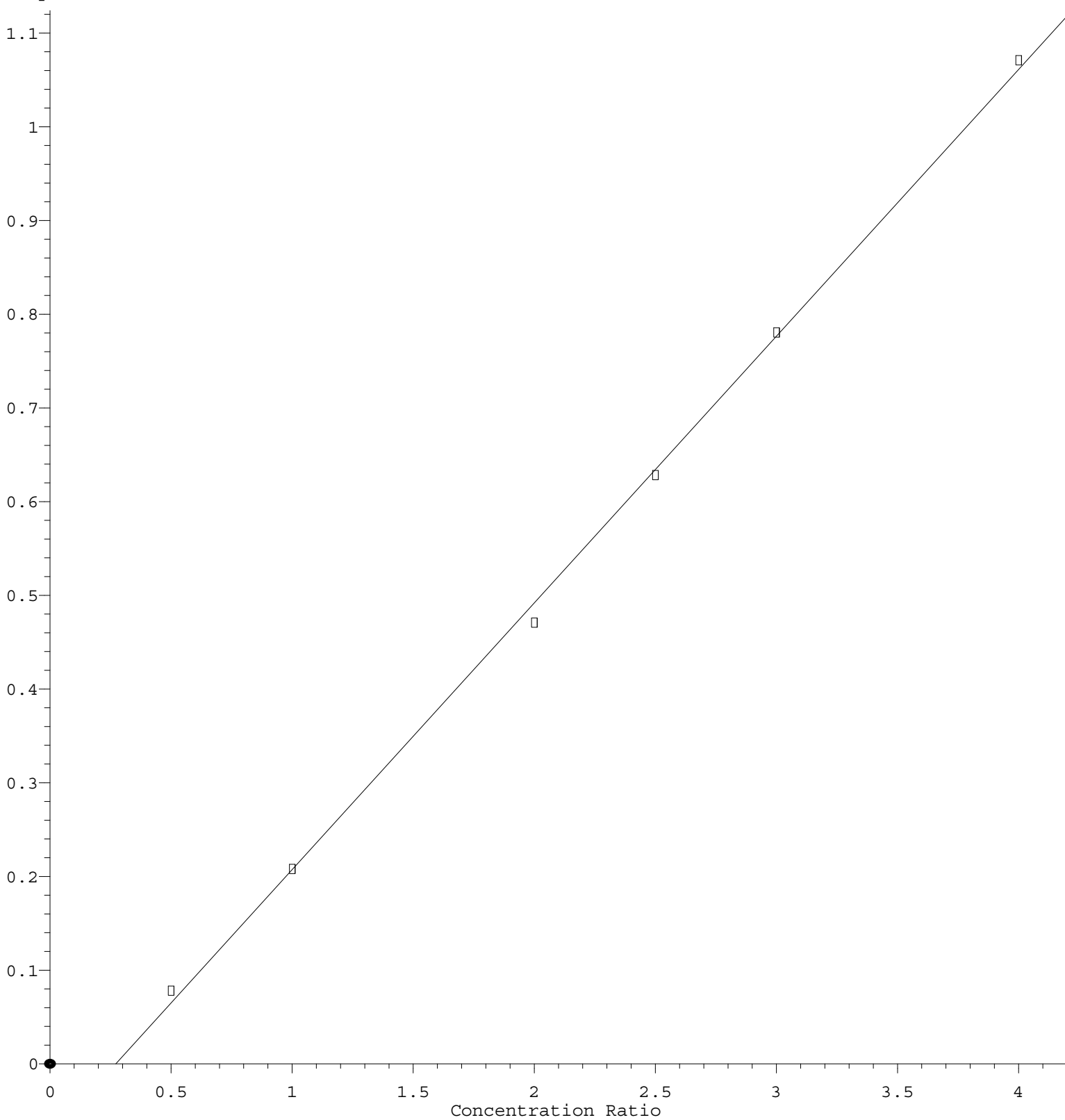
Coef of Det (r^2) = 0.998908 Curve Fit: Linear

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2,4-Dinitrophenol

Response Ratio



$$\text{Response} = 2.847\text{e-}001 * \text{Amt} - 7.736\text{e-}002$$

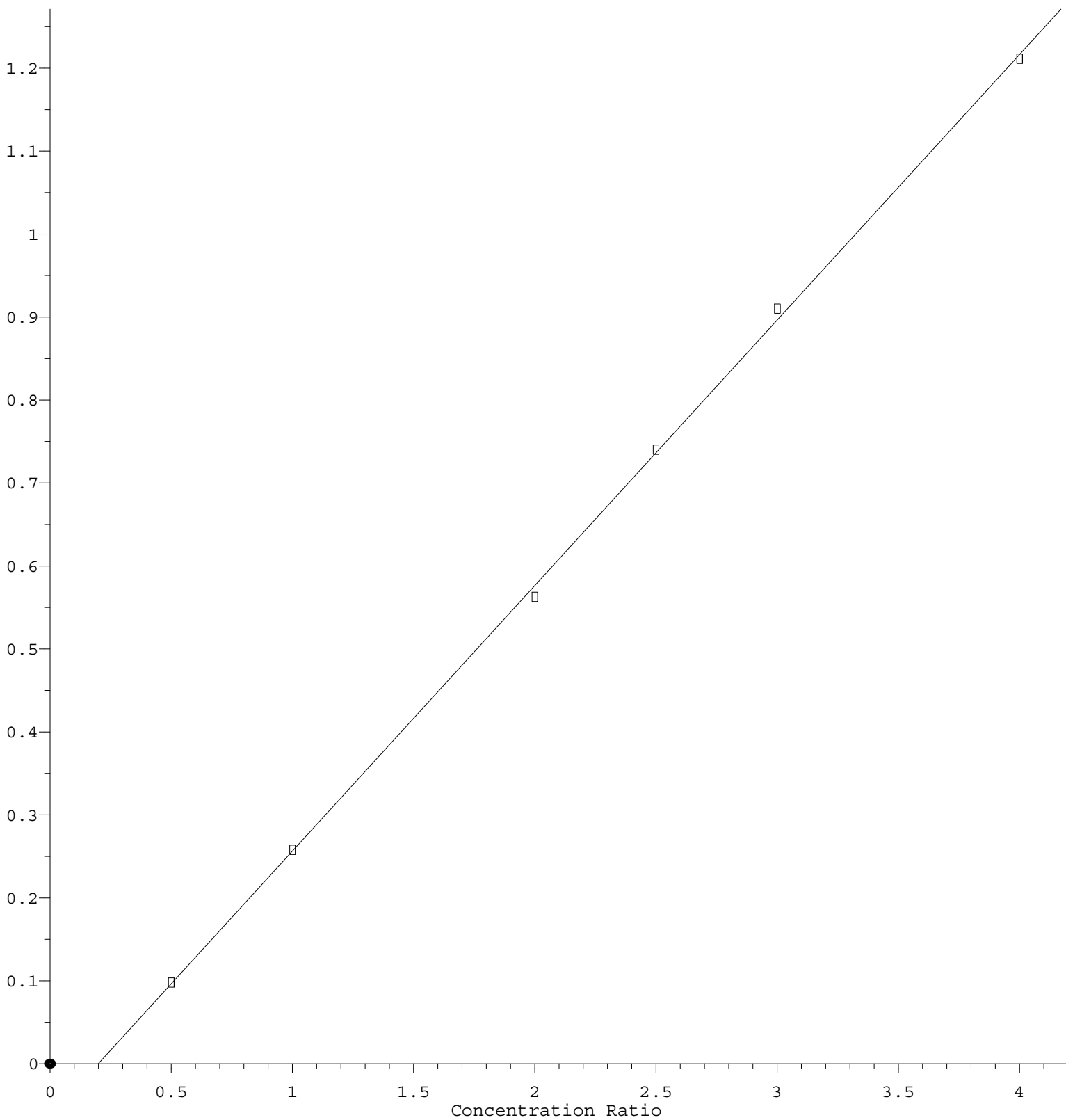
Coef of Det (r^2) = 0.998874 Curve Fit: Linear

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4-Nitrophenol

Response Ratio



$$\text{Response} = 3.201\text{e-}001 * \text{Amt} - 6.369\text{e-}002$$

Coef of Det (r^2) = 0.999512 Curve Fit: Linear

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