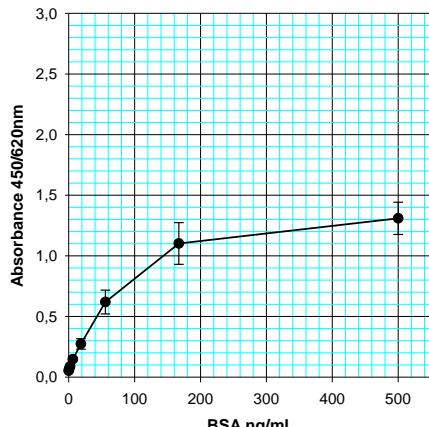
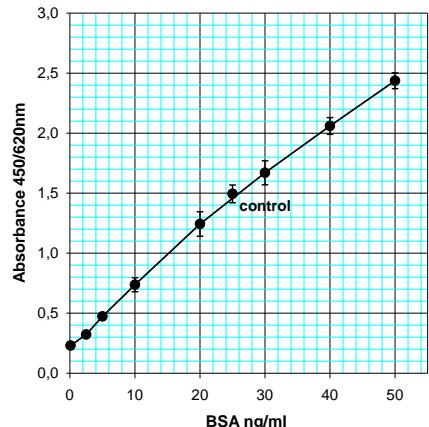
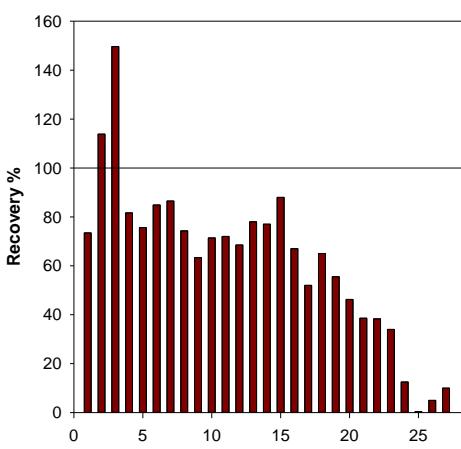
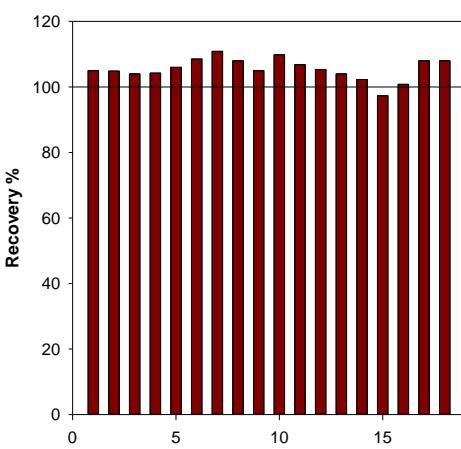
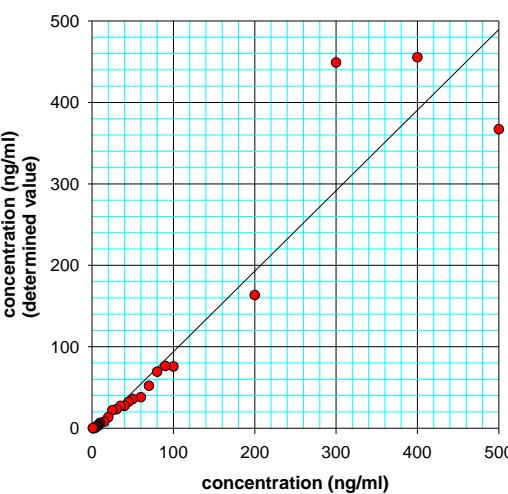
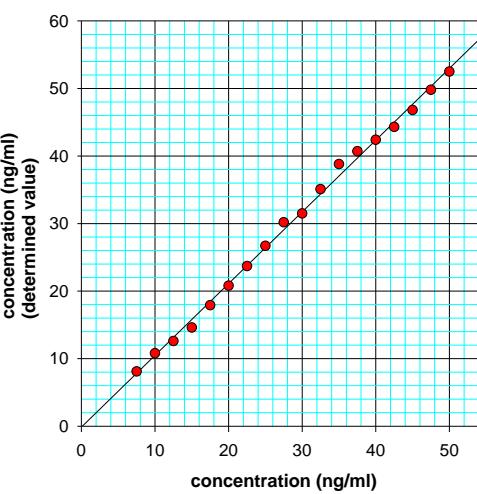


## Comparison of two commercially available BSA ELISA Kits

	Bovine Albumin ELISA Kit (Bethyl Laboratories, Inc.)	Serazym® Bovine Serum Albumin sensitive (Seramun Diagnostica GmbH)
<b>assay type</b>	<b>two-step assay</b>	<b>one-step assay</b>
<b>overall assay time</b>	<b>180 min</b>	<b>75 min</b>
<b>standard range</b>	<b>0 - 500 ng/ml</b>	<b>2.5 - 50 ng/ml</b>
<b>measuring range</b>	<b>0 - 500 ng/ml</b>   absorbance of standards: mean +/- 2 SD from 8-fold determinations	<b>0.1 - 50 ng/ml</b> (extended range by including diluent)   absorbance of standards: mean +/- 2 SD from 8-fold determinations
<b>lower detection limit</b>	<b>0.6 ng/ml</b> mean $A_{450\text{nm}}$ diluent + 3 SD	<b>0.5 ng/ml</b> mean $A_{450\text{nm}}$ diluent + 3 SD
<b>% recovery over the measuring range</b>	<b>0.3 – 150 %</b>  	<b>97.3 – 111 %</b>  

	Bovine Albumin ELISA Kit (Bethyl Laboratories, Inc.)	Serazym® Bovine Serum Albumin sensitive (Seramun Diagnostica GmbH)																																																																				
<b>correlation over the measuring range</b>	<p><math>r = 0.948</math></p>  <p>concentration (ng/ml) (determined value)</p> <p>concentration (ng/ml) (expected value)</p> <p>samples: 1ng - 500ng/ml</p>	<p><math>r = 0.999</math></p>  <p>concentration (ng/ml) (determined value)</p> <p>concentration (ng/ml) (expected value)</p> <p>samples 7.5 ng/ml - 50ng/ml</p>																																																																				
<b>precision (within-run coefficient of variation (CV) of absorbances</b>	<p>8-fold Determination; CV of absorbance</p> <table border="1"> <thead> <tr> <th>Std [ng/ml]</th> <th>mean</th> <th>SD</th> <th>CV [%]</th> </tr> </thead> <tbody> <tr><td>500</td><td>1.309</td><td>0.066</td><td>5.55</td></tr> <tr><td>167</td><td>1.102</td><td>0.086</td><td>8.56</td></tr> <tr><td>55.6</td><td>0.619</td><td>0.049</td><td>8.70</td></tr> <tr><td>18.5</td><td>0.274</td><td>0.022</td><td>8.65</td></tr> <tr><td>6.17</td><td>0.147</td><td>0.007</td><td>5.43</td></tr> <tr><td>2.06</td><td>0.088</td><td>0.004</td><td>5.24</td></tr> <tr><td>0.69</td><td>0.068</td><td>0.008</td><td>12.16</td></tr> </tbody> </table>	Std [ng/ml]	mean	SD	CV [%]	500	1.309	0.066	5.55	167	1.102	0.086	8.56	55.6	0.619	0.049	8.70	18.5	0.274	0.022	8.65	6.17	0.147	0.007	5.43	2.06	0.088	0.004	5.24	0.69	0.068	0.008	12.16	<p>8-fold-Determination; CV of absorbance</p> <table border="1"> <thead> <tr> <th>Std [ng/ml]</th> <th>mean</th> <th>SD</th> <th>CV [%]</th> </tr> </thead> <tbody> <tr><td>50</td><td>2.437</td><td>0.033</td><td>1.43</td></tr> <tr><td>40</td><td>2.060</td><td>0.035</td><td>1.79</td></tr> <tr><td>30</td><td>1.670</td><td>0.050</td><td>3.18</td></tr> <tr><td>20</td><td>1.243</td><td>0.051</td><td>4.41</td></tr> <tr><td>10</td><td>0.737</td><td>0.029</td><td>4.24</td></tr> <tr><td>5</td><td>0.473</td><td>0.013</td><td>2.86</td></tr> <tr><td>2.5</td><td>0.322</td><td>0.002</td><td>0.51</td></tr> <tr><td>25</td><td>1.494</td><td>0.037</td><td>2.61</td></tr> </tbody> </table>	Std [ng/ml]	mean	SD	CV [%]	50	2.437	0.033	1.43	40	2.060	0.035	1.79	30	1.670	0.050	3.18	20	1.243	0.051	4.41	10	0.737	0.029	4.24	5	0.473	0.013	2.86	2.5	0.322	0.002	0.51	25	1.494	0.037	2.61
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<b>summary</b>	<ul style="list-style-type: none"> <li>broad measuring range with poor differentiation in the upper range</li> <li>very poor precision</li> <li>insufficient recovery</li> </ul>	<ul style="list-style-type: none"> <li>narrow measuring range with excellent differentiation over the whole range</li> <li>high precision</li> <li>good recovery</li> </ul>																																																																				

