

Domoic Acid 2014 Proficiency Test Summaries

AFBI EURL 2014

Sample ID	Sample description	Assigned value	Reported value	Units	z-score
EURLMB/14/A/01	Mussel homogenate	20.4	20.0	mg/kg	-0.19
EURLMB/14/A/02	Scallop homogenate	10.8	11.2	mg/kg	0.30

AFBI Quasimeme Round 2014.1

Sample ID	Sample description	Round	Assigned value	Reported value	Units	z-score
Sample 1	Standard solution	2014.1	2.002	2.10	mg/Kg	0.33
Sample 2	Mussel Homogenate	2014.1	29.47	28.88	mg/Kg	-0.16
Sample 3	Oyster Homogenate	2014.1	18.08	18.89	mg/Kg	0.35

AFBI Quasimeme Round 2014.2

Sample ID	Sample description	Round	Assigned value	Reported value	Units	z-score
Sample 1	Standard solution	2014.2	1.01	1.03	mg/Kg	0.10
Sample 2	Mussel Homogenate	2014.2	42.04	44.80	mg/Kg	0.51
Sample 3	Scallop Homogenate	2014.2	28.71	33.40	mg/Kg	1.28

PSP 2014 Proficiency Test Summaries

AFBINI EURL 2014

Sample ID	Method	Matrix	Determinand	Assigned Value	Reported value	Units	Z-Score
EURLMB/14/P/01	HPLC	Mussel	C1C2	19	14	μmol/kg	-1.15
EURLMB/14/P/01	HPLC	Mussel	dcSTX	172	140	μmol/kg	-0.86
EURLMB/14/P/01	HPLC	Mussel	GTX2,3	259	177	μmol/kg	-1.48
EURLMB/14/P/01	HPLC	Mussel	GTX5 (B1)	16	13	μmol/kg	-0.79
EURLMB/14/P/01	HPLC	Mussel	STX	87	76	μmol/kg	-0.55
EURLMB/14/P/01	HPLC	Mussel	Total STX	562	420	ugSTX2HCL equiv/Kg	-1.36
EURLMB/14/P/02	HPLC	Mussel	GTX2,3	383	265	μmol/kg	-1.67
EURLMB/14/P/02	HPLC	Mussel	STX	798	710	μmol/kg	-0.63
EURLMB/14/P/02	HPLC	Mussel	Total STX	530	677	ugSTX2HCL equiv/Kg	1.58
EURLMB/14/P/02	MBA	Mussel		841	849	ugSTX2HCL equiv/Kg	0.06
EURLMB/14/P/03	HPLC	Razor clam	dcGTX2,3	72	56	μmol/kg	-0.88
EURLMB/14/P/03	HPLC	Razor clam	C1C2	80	70	μmol/kg	-0.58
EURLMB/14/P/03	HPLC	Razor clam	dcSTX	1333	1204	μmol/kg	-0.56
EURLMB/14/P/03	HPLC	Razor clam	GTX5 (B1)	270	243	μmol/kg	-0.50
EURLMB/14/P/03	HPLC	Razor clam	GTX6 (B2)	97	104	μmol/kg	0.33
EURLMB/14/P/03	HPLC	Razor clam	Total STX	1972	1678	ugSTX2HCL equiv/Kg	-0.17
EURLMB/14/P/03	MBA	Razor clam		1632	1527	ugSTX2HCL equiv/Kg	-0.40

AFBI Quasimeme Round 2014.1

Sample ID	Round	Method	Determinand	Sample description	Assigned value	Reported value	Units	z-score
Sample 1	2014.1	HPLC	STX	Mussel Homogenate	0.097	<0.056	μmol/kg	<
Sample 1	2014.1	HPLC	dc-STX	Mussel Homogenate	1.961	1.68	μmol/kg	-0.95
Sample 1	2014.1	HPLC	GTX5, (B1)	Mussel Homogenate	0.199	<0.16	μmol/kg	<
Sample 1	2014.1	HPLC	Total toxicity	Mussel Homogenate	750.4	625	μgSTXdiHCleq./kg	-1.32
Sample 2	2014.1	HPLC	dcGTX-2,3	Oyster Homogenate	10.24	7.224	μmol/kg	-2.27
Sample 2	2014.1	HPLC	dc-Neo	Oyster Homogenate	1.463	1.252	μmol/kg	-0.91
Sample 2	2014.1	HPLC	dc-STX	Oyster Homogenate	3.462	3.18	μmol/kg	-0.58
Sample 2	2014.1	HPLC	Total toxicity	Oyster Homogenate	3045	2445	μgSTXdiHCleq./kg	-1.57
Sample 3	2014.1	HPLC	STX	Mussel Homogenate	2.608	2.452	μmol/kg	-0.41
Sample 3	2014.1	HPLC	GTX-2,3	Mussel Homogenate	1.207	1.048	μmol/kg	-0.79
Sample 3	2014.1	HPLC	Total toxicity	Mussel Homogenate	1289	1147	μgSTXdiHCleq./kg	-0.87
Sample 4	2014.1	HPLC	STX	Oyster Homogenate	1.936	1.712	μmol/kg	-0.77
Sample 4	2014.1	HPLC	GTX-2,3	Oyster Homogenate	0.0923	0	μmol/kg	0.00
Sample 4	2014.1	HPLC	GTX-2,3	Oyster Homogenate	2.412	2.164	μmol/kg	-0.70
Sample 4	2014.1	HPLC	GTX-1,4	Oyster Homogenate	0.7408	0.756	μmol/kg	0.11
Sample 4	2014.1	HPLC	Total toxicity	Oyster Homogenate	1569	1402	μgSTXdiHCleq./kg	-0.85

Lipophilic 2014 Proficiency Test Summaries

AFBINI EURL 2014

Sample ID	Method	Matrix	Determinand	Assigned Value	Reported value	Units	Z-Score
EURLMB/14/L/02	MBA	Mussel	N/A	POSITIVE	POSITIVE	N/A	N/A
EURLMB/14/L/03	MBA	Mussel	N/A	POSITIVE	POSITIVE	N/A	N/A
EURLMB/14/L/01	LCMS:MS	Mussel	YTX	0.45	0.46	mg/kg	0.1
EURLMB/14/L/01	LCMS:MS	Mussel	Homo YTX	0.47	0.631	mg/kg	1.7
EURLMB/13/L/01	LCMS:MS	Mussel	Total YTX group	0.89	1.09	mg YTX eq./kg	1.3
EURLMB/14/L/02	LCMS:MS	Mussel	All toxins considered	<LOQ	<LOQ	µg/kg	
EURLMB/14/L/03	LCMS:MS	Mussel	Total Free OA group	91.7	79.9	µgOA eq./kg	-0.6
EURLMB/14/L/03	LCMS:MS	Mussel	Total OA+PTX group	258.4	252.3	µgOA eq./kg	-0.1
EURLMB/14/L/03	LCMS:MS	Mussel	AZA1	191.5	197.2	µg/kg	0.1
EURLMB/14/L/03	LCMS:MS	Mussel	AZA2	58.9	59.3	µg/kg	0.0
EURLMB/14/L/03	LCMS:MS	Mussel	AZA3	74.6	84.3	µg/kg	0.6
EURLMB/14/L/03	LCMS:MS	Mussel	Total AZA group	401.6	422	µg AZA eq./kg	0.3

AFBINI Quasimeme Round 2014.1

Sample ID	Round	Sample Description	Determinand	Assigned Value	Reported Value	Units	Z Score
Sample 1	2014.1	AZA Standard Solution	AZA-1	10.92	9.2	µg/kg	-1.21
Sample 1	2014.1	AZA Standard Solution	AZA-total	10.77	9.2	µgAZA eq/kg	-1.13
Sample 2	2014.1	DSP/AZP Extract Solution	AZA-1	16.05	15.5	µg/kg	-0.27
Sample 2	2014.1	DSP/AZP Extract Solution	AZA-2	3.618	3.1	µg/kg	-1.03
Sample 2	2014.1	DSP/AZP Extract Solution	AZA-3	5.049	5.8	µg/kg	1.1

<i>Sample ID</i>	<i>Round</i>	<i>Sample Description</i>	<i>Determinand</i>	<i>Assigned Value</i>	<i>Reported Value</i>	<i>Units</i>	<i>Z Score</i>
Sample 2	2014.1	DSP/AZP Extract Solution	AZA-total	28.51	29.2	µgAZA eq/kg	0.19
Sample 2	2014.1	DSP/AZP Extract Solution	Free-DTX2	27.11	25	µg/kg	-0.61
Sample 2	2014.1	DSP/AZP Extract Solution	Free-OA	13.13	12.4	µg/kg	-0.43
Sample 2	2014.1	DSP/AZP Extract Solution	Total-free-OA+DTX1+DTX2	31.25	27.4	µgOA eq/kg	-0.97
Sample 2	2014.1	DSP/AZP Extract Solution	Total-DTX2	51.35	52.1	µg/kg	0.12
Sample 2	2014.1	DSP/AZP Extract Solution	Total-OA	42.16	45.2	µg/kg	0.57
Sample 2	2014.1	DSP/AZP Extract Solution	Total-hy-OA+DTX1+DTX2	73.56	76.5	µgOA eq/kg	0.32
Sample 2	2014.1	DSP/AZP Extract Solution	Total OA + PTX	70.98	76.5	µgOA eq/kg	0.62
Sample 3	2014.1	Mussel Homogenate	AZA-1	1105	1206.5	µg/kg	0.74
Sample 3	2014.1	Mussel Homogenate	AZA-2	285.2	317.7	µg/kg	0.91
Sample 3	2014.1	Mussel Homogenate	AZA-3	196.1	221.1	µg/kg	1.02
Sample 3	2014.1	Mussel Homogenate	AZA-total	1907	2089.9	µgAZA eq/kg	0.77
Sample 3	2014.1	Mussel Homogenate	Free-DTX1	250.9	238.1	µg/kg	-0.41
Sample 3	2014.1	Mussel Homogenate	Free-DTX2	90.22	76.5	µg/kg	-1.21
Sample 3	2014.1	Mussel Homogenate	Free-OA	160	171.9	µg/kg	0.59
Sample 3	2014.1	Mussel Homogenate	Total-free-OA+DTX1+DTX2	489.3	455.9	µgOA eq/kg	-0.55
Sample 3	2014.1	Mussel Homogenate	Total-DTX1	426.9	457.7	µg/kg	0.58
Sample 3	2014.1	Mussel Homogenate	Total-DTX2	213.3	216	µg/kg	0.10
Sample 3	2014.1	Mussel Homogenate	Total-OA	526.5	574.3	µg/kg	0.73
Sample 3	2014.1	Mussel Homogenate	Total-hy-OA+DTX1+DTX2	1082	1161.6	µgOA eq/kg	0.59
Sample 3	2014.1	Mussel Homogenate	Total OA + PTX	1051	1161.6	µgOA eq/kg	0.84
Sample 3	2014.1	Mussel Homogenate	YTX	0.1625	0.1511	mg/kg	-0.16
Sample 3	2014.1	Mussel Homogenate	45-OH-homo-YTX	NA	0.0804	mg/kg	0
Sample 3	2014.1	Mussel Homogenate	Total-YTX	0.1822	0.2315	mg YTXeq./kg	0.68
Sample 4	2014.1	Mussel Homogenate	AZA-1	116.7	106.2	µg/kg	-0.72
Sample 4	2014.1	Mussel Homogenate	AZA-2	35.95	35.2	µg/kg	-0.17
Sample 4	2014.1	Mussel Homogenate	AZA-3	22.56	26.9	µg/kg	1.51
Sample 4	2014.1	Mussel Homogenate	AZA-total	215.9	207.1	µgAZA eq/kg	-0.33
Sample 4	2014.1	Mussel Homogenate	Free-DTX1	75.14	67.1	µg/kg	-0.85
Sample 4	2014.1	Mussel Homogenate	Free-DTX2	477.1	415	µg/kg	-1.04
Sample 4	2014.1	Mussel Homogenate	Free-OA	91.99	81.3	µg/kg	-0.93
Sample 4	2014.1	Mussel Homogenate	Total-free-OA+DTX1+DTX2	476.5	397.4	µgOA eq/kg	-1.33
Sample 4	2014.1	Mussel Homogenate	Total-DTX1	109.2	100	µg/kg	-0.67

<i>Sample ID</i>	<i>Round</i>	<i>Sample Description</i>	<i>Determinand</i>	<i>Assigned Value</i>	<i>Reported Value</i>	<i>Units</i>	<i>Z Score</i>
Sample 4	2014.1	Mussel Homogenate	Total-DTX2	729.4	611	µg/kg	-1.3
Sample 4	2014.1	Mussel Homogenate	Total-OA	214.9	199.1	µg/kg	-0.59
Sample 4	2014.1	Mussel Homogenate	Total-hy-OA+DTX1+DTX2	790.6	665.7	µgOA eq/kg	-1.26
Sample 4	2014.1	Mussel Homogenate	Total OA + PTX	742.8	665.7	µgOA eq/kg	-0.83
Sample 4	2014.1	Mussel Homogenate	YTX	1.025	0.9553	mg/kg	-0.39
Sample 4	2014.1	Mussel Homogenate	Total-YTX	0.9967	0.9553	mg YTXeq./kg	-0.24

AFBINI Quasimeme Round 2014.2

<i>Sample ID</i>	<i>Round</i>	<i>Sample Description</i>	<i>Determinand</i>	<i>Assigned Value</i>	<i>Reported Value</i>	<i>Units</i>	<i>Z Score</i>
Sample 1	2014.2	AZA Standard Solution	AZA-1	18.01	17.3	µg/kg	-0.31
Sample 1	2014.2	AZA Standard Solution	AZA-total	18.09	17.3	µgAZA eq/kg	-0.34
Sample 2	2014.2	Lipo Standard Solution	Free-DTX2	33.96	35.24	µg/kg	0.30
Sample 2	2014.2	Lipo Standard Solution	Free-OA	57.97	56.70	µg/kg	-0.17
Sample 2	2014.2	Lipo Standard Solution	Total-free-OA+DTX1+DTX2	79.35	77.85	µgOA eq/kg	-0.15
Sample 3	2014.2	DSP/AZP Extract Solution	AZA-1	69.11	70.00	µg/kg	0.10
Sample 3	2014.2	DSP/AZP Extract Solution	AZA-2	19.50	21.10	µg/kg	0.64
Sample 3	2014.2	DSP/AZP Extract Solution	AZA-3	15.40	15.20	µg/kg	-0.13
Sample 3	2014.2	DSP/AZP Extract Solution	AZA-total	123.60	129.30	µgAZA eq/kg	0.37
Sample 3	2014.2	DSP/AZP Extract Solution	Free-DTX1	10.60	10.40	µg/kg	0.26
Sample 3	2014.2	DSP/AZP Extract Solution	Free-DTX2	38.76	39.90	µg/kg	0.23
Sample 3	2014.2	DSP/AZP Extract Solution	Free-OA	12.52	10.40	µg/kg	-1.31
Sample 3	2014.2	DSP/AZP Extract Solution	Total OA + PTX	94.38	92.50	µgOA eq/kg	-0.31
Sample 3	2014.2	DSP/AZP Extract Solution	Total-DTX1	13.93	14.00	µg/kg	0.04
Sample 3	2014.2	DSP/AZP Extract Solution	Total-DTX2	63.36	67.90	µg/kg	0.57
Sample 3	2014.2	DSP/AZP Extract Solution	Total-free-OA+DTX1+DTX2	46.66	44.70	µgOA eq/kg	-0.33
Sample 3	2014.2	DSP/AZP Extract Solution	Total-hy-OA+DTX1+DTX2	96.23	92.50	µgOA eq/kg	-0.16
Sample 3	2014.2	DSP/AZP Extract Solution	Total-OA	41.33	37.80	µg/kg	-0.68
Sample 4	2014.2	Mussel Homogenate	45-OH-YTX	N/A	0.078	mg/kg	N/A
Sample 4	2014.2	Mussel Homogenate	AZA-1	1100.00	1104.20	µg/kg	0.03

<i>Sample ID</i>	<i>Round</i>	<i>Sample Description</i>	<i>Determinand</i>	<i>Assigned Value</i>	<i>Reported Value</i>	<i>Units</i>	<i>Z Score</i>
Sample 4	2014.2	Mussel Homogenate	AZA-2	279.40	292.50	µg/kg	0.38
Sample 4	2014.2	Mussel Homogenate	AZA-3	189.20	195.40	µg/kg	0.26
Sample 4	2014.2	Mussel Homogenate	AZA-total	1887.00	1904.20	µgAZA eq/kg	0.07
Sample 4	2014.2	Mussel Homogenate	Free-DTX1	237.10	253.00	µg/kg	0.54
Sample 4	2014.2	Mussel Homogenate	Free-DTX2	87.28	84.10	µg/kg	-0.29
Sample 4	2014.2	Mussel Homogenate	Free-OA	169.90	156.30	µg/kg	-0.64
Sample 4	2014.2	Mussel Homogenate	Total OA + PTX	1104.00	946.10	µgOA eq/kg	-1.19
Sample 4	2014.2	Mussel Homogenate	Total-DTX1	434.10	415.30	µg/kg	-0.35
Sample 4	2014.2	Mussel Homogenate	Total-DTX2	224.20	176.40	µg/kg	-1.70
Sample 4	2014.2	Mussel Homogenate	Total-free-OA+DTX1+DTX2	465.50	459.70	µgOA eq/kg	-0.10
Sample 4	2014.2	Mussel Homogenate	Total-hy-OA+DTX1+DTX2	1111.00	946.10	µgOA eq/kg	-1.14
Sample 4	2014.2	Mussel Homogenate	Total-OA	535.10	425.00	µg/kg	-1.64
Sample 4	2014.2	Mussel Homogenate	Total-YTX	0.1834	0.2406	mgYTXeq./kg	0.78
Sample 4	2014.2	Mussel Homogenate	YTX	0.1292	0.1626	mg/kg	-0.55
Sample 5	2014.2	Mussel Homogenate	AZA-1	130.9	137.6	µg/kg	0.41
Sample 5	2014.2	Mussel Homogenate	AZA-2	44.94	46.6	µg/kg	0.29
Sample 5	2014.2	Mussel Homogenate	AZA-3	32.87	32.90	µg/kg	0.01
Sample 5	2014.2	Mussel Homogenate	AZA-total	252.20	267.70	µgAZA eq/kg	0.49
Sample 5	2014.2	Mussel Homogenate	Free-DTX2	539.50	496.20	µg/kg	-0.64
Sample 5	2014.2	Mussel Homogenate	Free-OA	94.78	86.10	µg/kg	-0.73
Sample 5	2014.2	Mussel Homogenate	Total OA + PTX	758.00	684.20	µgOA eq/kg	-0.89
Sample 5	2014.2	Mussel Homogenate	Total-DTX2	845.00	774.30	µg/kg	-0.67
Sample 5	2014.2	Mussel Homogenate	Total-free-OA+DTX1+DTX2	454.40	383.80	µgOA eq/kg	-1.24
Sample 5	2014.2	Mussel Homogenate	Total-hy-OA+DTX1+DTX2	769.80	684.20	µgOA eq/kg	-0.78
Sample 5	2014.2	Mussel Homogenate	Total-OA	236.80	219.70	µg/kg	-0.58
Sample 5	2014.2	Mussel Homogenate	Total-YTX	1.1920	1.0920	mgYTXeq./kg	-0.50
Sample 5	2014.2	Mussel Homogenate	YTX	1.2030	1.0920	mg/kg	-0.55