

**Table S1. Dilution of CRM-OA-d (10.4µM) for PP2A inhibition assay**

Std No.	OA nM	dilution	OA nM / well
①	200	CRM OA-d 10 µL + SB* 490 µL	40
②	50	Std① 100 µL + SB* 300 µL	10
③	20	Std① 40 µL + SB* 360 µL	4
④	5	Std② 40 µL + SB* 360 µL	1
⑤	2	Std③ 40 µL + SB* 360 µL	0.4
⑥	0.5	Std④ 40 µL + SB* 360 µL	0.1
⑦	0.2	Std⑤ 40 µL + SB* 360 µL	0.04
⑧	0.05	Std⑥ 40 µL + SB* 360 µL	0.01
⑨	0.02	Std⑦ 40 µL + SB* 360 µL	0.004
⑩	0.005	Std⑧ 40 µL + SB* 360 µL	0.001

\* PP2A inhibition assay sample buffer (34mM MgCl<sub>2</sub>, 4mM EDTA, 10% EtOH, 0.5% Tween60, Tris-HCl pH8.4)

**Table S2. Dilution of CRM-DTX1-b (10.4µM) for PP2A inhibition assay**

Std No.	DTX1 nM	dilution	DTX1 nM / well
①	200	CRM DTX1-b 10 µL + SB* 490 µL	40
②	50	Std① 100 µL + SB* 300 µL	10
③	20	Std① 40 µL + SB* 360 µL	4
④	5	Std② 40 µL + SB* 360 µL	1
⑤	2	Std③ 40 µL + SB* 360 µL	0.4
⑥	0.5	Std④ 40 µL + SB* 360 µL	0.1
⑦	0.2	Std⑤ 40 µL + SB* 360 µL	0.04
⑧	0.05	Std⑥ 40 µL + SB* 360 µL	0.01
⑨	0.02	Std⑦ 40 µL + SB* 360 µL	0.004
⑩	0.005	Std⑧ 40 µL + SB* 360 µL	0.001

\* PP2A inhibition assay sample buffer (34mM MgCl<sub>2</sub>, 4mM EDTA, 10% EtOH, 0.5% Tween60, Tris-HCl pH8.4)

**Table S3. Dilution of CRM-DTX2-b (4.7µM) for PP2A inhibition assay**

Std No.	DTX2 nM	dilution	DTX2 nM / well
①	200	CRM DTX2-b 22 µL + SB* 478 µL	40
②	50	Std① 100 µL + SB* 300 µL	10
③	20	Std① 40 µL + SB* 360 µL	4
④	5	Std② 40 µL + SB* 360 µL	1
⑤	2	Std③ 40 µL + SB* 360 µL	0.4
⑥	0.5	Std④ 40 µL + SB* 360 µL	0.1
⑦	0.2	Std⑤ 40 µL + SB* 360 µL	0.04
⑧	0.05	Std⑥ 40 µL + SB* 360 µL	0.01
⑨	0.02	Std⑦ 40 µL + SB* 360 µL	0.004
⑩	0.005	Std⑧ 40 µL + SB* 360 µL	0.001

\* PP2A inhibition assay sample buffer (34mM MgCl<sub>2</sub>, 4mM EDTA, 10% EtOH, 0.5% Tween60, Tris-HCl pH8.4)

**Table S4. Dilution of CRM-OA-d (10.4µM) for neuro-2a cell viability assay**

Std No.	OA µM	dilution	OA µM / well
①	6	CRM-OA-d 36.6 µL + Medium* 25.4 µL	300
②	2	Std① 15 µL + Medium* 30 µL	100
③	0.6	Std① 5 µL + Medium* 45 µL	30
④	0.2	Std② 5 µL + Medium* 45 µL	10
⑤	0.06	Std③ 5 µL + Medium* 45 µL	3
⑥	0.02	Std④ 5 µL + Medium* 45 µL	1

\* RPMI-1640 medium (5% FBS, 1mM sodium pyruvate, 1% Penicillin-Streptomycin Solution)

**Table S5. Dilution of CRM-DTX1-b (10.4µM) for neuro-2a cell viability assay**

Std No.	DTX1 µM	dilution	DTX1 µM / well
①	6	CRM-DTX1-b 36.6 µL + Medium* 25.4 µL	300
②	2	Std① 15 µL + Medium* 30 µL	100
③	0.6	Std① 5 µL + Medium* 45 µL	30
④	0.2	Std② 5 µL + Medium* 45 µL	10
⑤	0.06	Std③ 5 µL + Medium* 45 µL	3
⑥	0.02	Std④ 5 µL + Medium* 45 µL	1

\* RPMI-1640 medium (5% FBS, 1mM sodium pyruvate, 1% Penicillin-Streptomycin Solution)

Table S6. Dilution of CRM-DTX2-b (4.7µM) for neuro-2a cell viability assay

Std No.	DTX2 µM	dilution	DTX2 µM / well
①	4	CRM-DTX2-b 59.5 µL + Medium* 10.5 µL	200
②	2	Std① 25 µL + Medium* 25 µL	100
③	0.6	Std① 7.5 µL + Medium* 42.5 µL	30
④	0.2	Std② 5 µL + Medium* 45 µL	10
⑤	0.06	Std③ 5 µL + Medium* 45 µL	3
⑥	0.02	Std④ 5 µL + Medium* 45 µL	1

\* RPMI-1640 medium (5% FBS, 1mM sodium pyruvate, 1% Penicillin-Streptomycin Solution)

Table S7. OAs concentration in diluted CRM-DSP-MUS-c for PP2A inhibition assay

Sample no.	OAs (µg/g )		
	OA	DTX1	DTX2
1	0.214	0.214	0.172
2	0.107	0.107	0.086
3	0.053	0.053	0.043
4	0.240	0.110	0.220
5	0.120	0.055	0.110
6	0.060	0.028	0.055

Sample no. 1, 2, 3 = unhydrolyzed, 4, 5, 6 = hydrolyzed samples.

Table S8. Total OA equivalents (µg /g whole meat) expected according to the OApp2 shown in Table 1 and the OA concentrations shown in Table S7

Sample no.	OA equivalents (µg/g )			
	OA	DTX1	DTX2	Total
1	0.214	0.3424	0.0516	0.6080
2	0.107	0.1712	0.0258	0.3040
3	0.053	0.0848	0.0129	0.1507
4	0.240	0.1760	0.0660	0.4820
5	0.120	0.0880	0.0330	0.2410
6	0.060	0.0448	0.0165	0.1213

Sample no. 1, 2, 3 = unhydrolyzed, 4, 5, 6 = hydrolyzed samples.