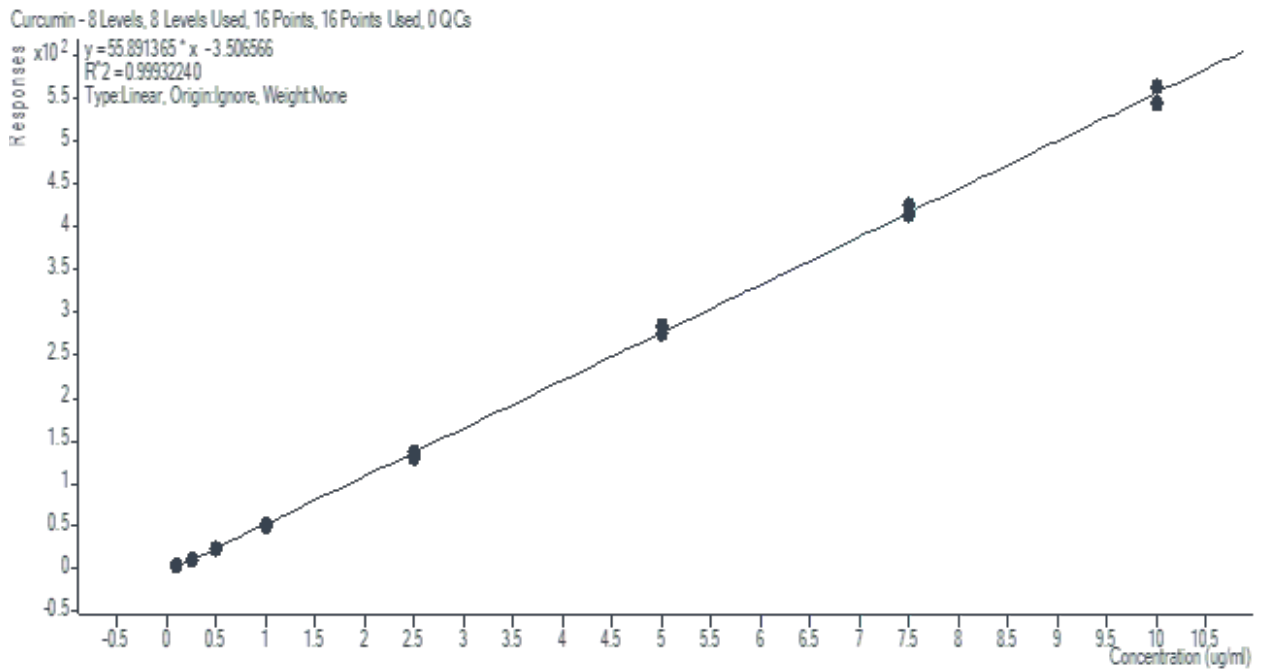


Annex 2: Curcuminoid validation data

Curcumin

Calibration



Recovery and repeatability

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
Low spike sample 1	9,899	9,217	9,203
Low spike sample 2	8,983	9,617	9,093
Low spike sample 3	8,531	8,906	9,180

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
Low spike sample 4	8,612	8,853	9,416
Low spike sample 5	8,716	8,632	9,816
Low spike sample 6	8,657	9,230	9,688
Low spike sample 7	8,631	8,703	9,695
Average	8,861	9,023	9,442
Recovery	98%	98%	105%
Repeatability (RSD)	5.4%	1.1%	3.1%
Medium spike sample 1	88,083	88,309	90,267
Medium spike sample 2	86,934	88,557	89,552
Medium spike sample 3	86,023	86,293	87,761
Medium spike sample 4	86,003	87,335	89,793
Medium spike sample 5	88,285	89,001	89,365
Medium spike sample 6	90,875	88,664	90,956

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
Medium spike sample 7	90,134	88,336	90,049
Average	88,048	88,071	89,678
Recovery	98%	98%	100%
Repeatability (RSD)	2.2%	1.1%	1.1%
High spike sample 1	180,540	178,114	179,583
High spike sample 2	183,548	180,893	182,099
High spike sample 3	180,048	178,661	183,678
High spike sample 4	178,903	176,628	178,446
High spike sample 5	178,456	176,339	175,942
High spike sample 6	178,537	176,395	177,756
High spike sample 7	176,755	175,586	180,721
Average	179,541	177,516	179,747
Recovery	100%	99%	100%
Repeatability (RSD)	1.2%	1.0%	1.5%

Bisdemethoxycurcumin

Calibration

Recovery and repeatability

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
Low spike sample 1	10,055	8,642	9,529
Low spike sample 2	9,389	9,076	9,542
Low spike sample 3	9,583	8,575	9,586
Low spike sample 4	9,356	8,941	9,199
Low spike sample 5	9,644	8,630	9,546
Low spike sample 6	9,632	9,064	9,433

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
Low spike sample 7	9,675	8,492	9,603
Average	9,619	8,774	9,491
Recovery	107%	97%	105%
Repeatability (RSD)	2.4%	2.8%	1.5%
Medium spike sample 1	84,061	90,443	87,706
Medium spike sample 2	83,835	91,551	89,092
Medium spike sample 3	85,270	92,213	86,301
Medium spike sample 4	87,098	90,044	87,764
Medium spike sample 5	85,970	90,827	90,689
Medium spike sample 6	88,088	92,214	89,824
Medium spike sample 7	85,824	93,060	89,137
Average	85,724	91,662	88,645
Recovery	95%	102%	98%
Repeatability (RSD)	1.8%	1.4%	1.7%

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
High spike sample 1	181,848	185,629	179,314
High spike sample 2	185,518	191,136	182,990
High spike sample 3	182,230	190,187	181,666
High spike sample 4	182,972	185,342	180,509
High spike sample 5	182,480	186,815	182,336
High spike sample 6	181,894	180,271	182,455
High spike sample 7	182,171	183,198	184,728
Average	182,730	186,083	182,000
Recovery	102%	103%	101%
Repeatability (RSD)	0.7%	2.0%	1.0%

Demethoxycurcumin

Calibration

Recovery and repeatability

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
Low spike sample 1	11,016	8,567	9,527
Low spike sample 2	10,113	8,704	9,472
Low spike sample 3	10,173	8,156	9,239
Low spike sample 4	9,957	8,663	8,534
Low spike sample 5	10,611	7,909	9,457
Low spike sample 6	10,452	8,168	9,463
Low spike sample 7	10,327	7,999	9,476
Average	10,378	8,309	9,310
Recovery	115%	92%	103%

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
Repeatability (RSD)	3.4%	4.0%	3.8%
Medium spike sample 1	82,492	90,081	87,906
Medium spike sample 2	91,684	91,188	90,377
Medium spike sample 3	90,315	88,761	86,577
Medium spike sample 4	90,267	90,235	87,702
Medium spike sample 5	87,640	88,703	88,382
Medium spike sample 6	90,271	90,246	91,100
Medium spike sample 7	87,736	91,431	88,961
Average	88,629	90,105	88,715
Recovery	98%	100%	99%
Repeatability (RSD)	3.5%	1.2%	1.8%
High spike sample 1	177,896	180,299	177,926
High spike sample 2	180,907	184,294	179,632

Sample	Batch 1 concentration (mg/kg)	Batch 2 concentration (mg/kg)	Batch 3 concentration (mg/kg)
High spike sample 3	181,684	185,411	182,946
High spike sample 4	177,627	182,840	177,503
High spike sample 5	183,585	186,984	176,702
High spike sample 6	180,224	175,844	170,056
High spike sample 7	179,451	181,837	179,465
Average	180,196	182,501	177,747
Recovery	100%	101%	99%
Repeatability (RSD)	1.2%	2.0%	2.2%