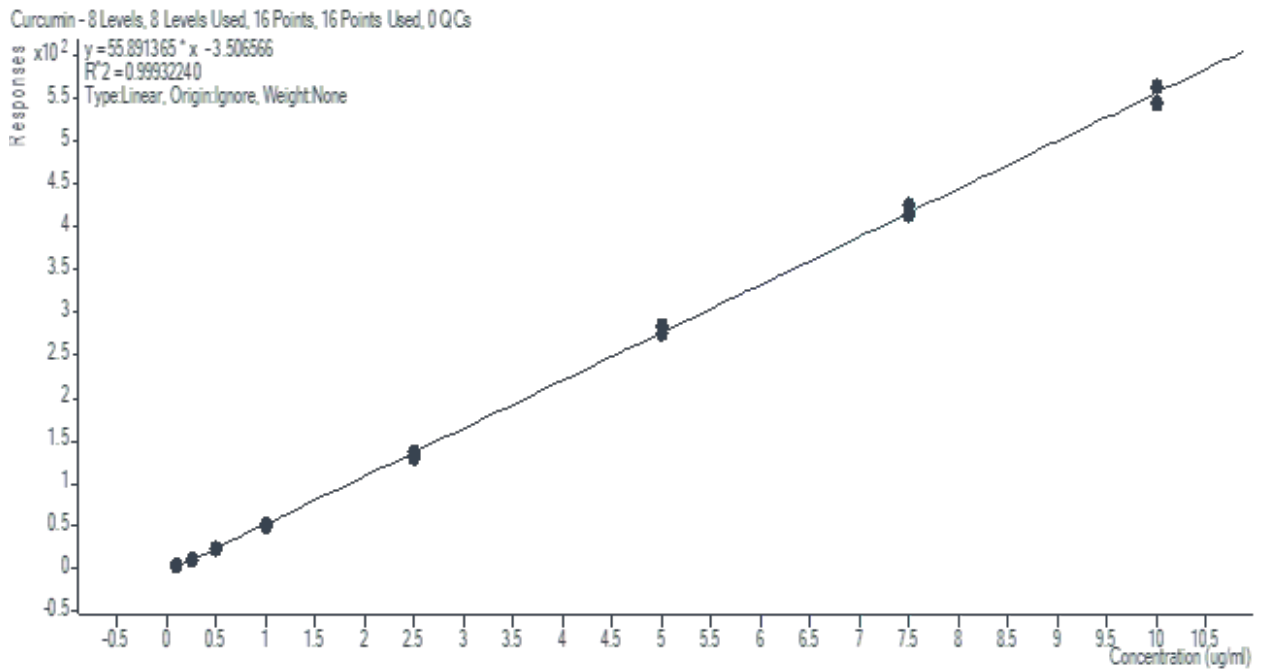


# Annex 2: Curcuminoid validation data

## 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

<b>Sample</b>	<b>Batch 1 concentration (mg/kg)</b>	<b>Batch 2 concentration (mg/kg)</b>	<b>Batch 3 concentration (mg/kg)</b>
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
<b>Average</b>	<b>8,861</b>	<b>9,023</b>	<b>9,442</b>
<b>Recovery</b>	<b>98%</b>	<b>98%</b>	<b>105%</b>
<b>Repeatability (RSD)</b>	<b>5.4%</b>	<b>1.1%</b>	<b>3.1%</b>
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

<b>Sample</b>	<b>Batch 1 concentration (mg/kg)</b>	<b>Batch 2 concentration (mg/kg)</b>	<b>Batch 3 concentration (mg/kg)</b>
Medium spike sample 7	90,134	88,336	90,049
<b>Average</b>	<b>88,048</b>	<b>88,071</b>	<b>89,678</b>
<b>Recovery</b>	<b>98%</b>	<b>98%</b>	<b>100%</b>
<b>Repeatability (RSD)</b>	<b>2.2%</b>	<b>1.1%</b>	<b>1.1%</b>
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
<b>Average</b>	<b>179,541</b>	<b>177,516</b>	<b>179,747</b>
<b>Recovery</b>	<b>100%</b>	<b>99%</b>	<b>100%</b>
<b>Repeatability (RSD)</b>	<b>1.2%</b>	<b>1.0%</b>	<b>1.5%</b>

# 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

<b>Sample</b>	<b>Batch 1 concentration (mg/kg)</b>	<b>Batch 2 concentration (mg/kg)</b>	<b>Batch 3 concentration (mg/kg)</b>
Low spike sample 7	9,675	8,492	9,603
<b>Average</b>	<b>9,619</b>	<b>8,774</b>	<b>9,491</b>
<b>Recovery</b>	<b>107%</b>	<b>97%</b>	<b>105%</b>
<b>Repeatability (RSD)</b>	<b>2.4%</b>	<b>2.8%</b>	<b>1.5%</b>
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
<b>Average</b>	<b>85,724</b>	<b>91,662</b>	<b>88,645</b>
<b>Recovery</b>	<b>95%</b>	<b>102%</b>	<b>98%</b>
<b>Repeatability (RSD)</b>	<b>1.8%</b>	<b>1.4%</b>	<b>1.7%</b>

<b>Sample</b>	<b>Batch 1 concentration (mg/kg)</b>	<b>Batch 2 concentration (mg/kg)</b>	<b>Batch 3 concentration (mg/kg)</b>
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
<b>Average</b>	<b>182,730</b>	<b>186,083</b>	<b>182,000</b>
<b>Recovery</b>	<b>102%</b>	<b>103%</b>	<b>101%</b>
<b>Repeatability (RSD)</b>	<b>0.7%</b>	<b>2.0%</b>	<b>1.0%</b>

## **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
<b>Average</b>	<b>10,378</b>	<b>8,309</b>	<b>9,310</b>
<b>Recovery</b>	<b>115%</b>	<b>92%</b>	<b>103%</b>

<b>Sample</b>	<b>Batch 1 concentration (mg/kg)</b>	<b>Batch 2 concentration (mg/kg)</b>	<b>Batch 3 concentration (mg/kg)</b>
<b>Repeatability (RSD)</b>	<b>3.4%</b>	<b>4.0%</b>	<b>3.8%</b>
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
<b>Average</b>	<b>88,629</b>	<b>90,105</b>	<b>88,715</b>
<b>Recovery</b>	<b>98%</b>	<b>100%</b>	<b>99%</b>
<b>Repeatability (RSD)</b>	<b>3.5%</b>	<b>1.2%</b>	<b>1.8%</b>
High spike sample 1	177,896	180,299	177,926
High spike sample 2	180,907	184,294	179,632



<b>Sample</b>	<b>Batch 1 concentration (mg/kg)</b>	<b>Batch 2 concentration (mg/kg)</b>	<b>Batch 3 concentration (mg/kg)</b>
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
<b>Average</b>	<b>180,196</b>	<b>182,501</b>	<b>177,747</b>
<b>Recovery</b>	<b>100%</b>	<b>101%</b>	<b>99%</b>
<b>Repeatability (RSD)</b>	<b>1.2%</b>	<b>2.0%</b>	<b>2.2%</b>