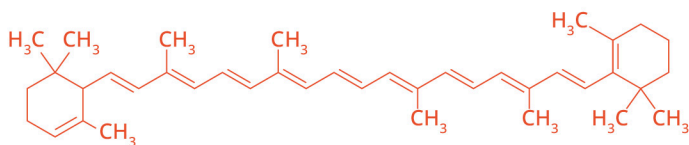


CAROTENOID Targeted Metabolomics



Introduction



Delivering absolute quantification of a wide-coverage of **68 carotenoid compounds** from wide varieties of species and tissue types.

Benefits of Carotenoid Assay



Quantitative accuracy

Quantification using external standard method, linear standard curve > 0.99.



Broad coverage

68 carotenoids, including lycopene, β -carotene, octahydrylophenone, lutein, etc. Contact us for a full list.



High sensitivity

Detection at ng/mL level.



Rich experience

Participated on more than 1000 projects covering 300+ species and published in Nature Communications, The Plant Journal, Food Chemistry and others.

Database

No.	Carotenoids Panel
1	α -carotene
2	antheraxanthin
3	lycopene
4	zeaxanthin
5	violaxanthin
6	γ -carotene
7	neoxanthin
8	β -carotene
9	lutein
10	β -cryptoxanthin
11	astaxanthin
12	phytofluene
13	capsanthin
14	(E/Z)-phytoene
15	ϵ -carotene
16	α -cryptoxanthin
...	...
68	capsorubin

Analysis Method and Instrumentation

LC-MS/MS
(SCEX Triple Quad 6500+)

Applications



Molecular mechanism study on coloring of fruits, vegetables, and flowers



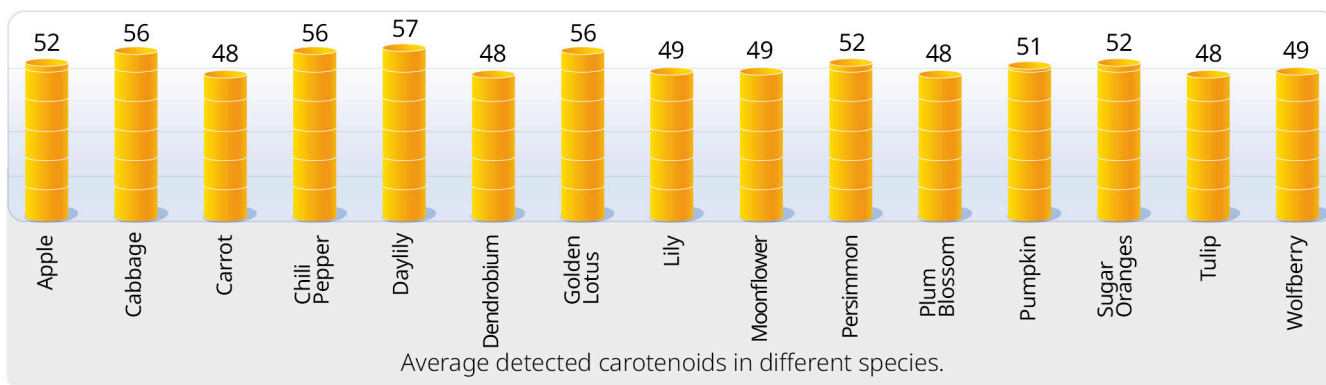
Study on the regulation of carotenoid synthesis



Molecular mechanism study on quality of fruits, vegetables

Project Experience

A total of 68 carotenoids could be detected from different species, with an average detection of 50 carotenoids.



Selected Publications

NO.	Year	Journal	Title
1	2022	Molecular Plant	Multi-omics analyses of 398 foxtail millet accessions reveal genomic regions associated with domestication, metabolite traits and anti-inflammatory effects.
2	2021	Horticulture Research	The histone variant SI_H2A.Z regulates carotenoid biosynthesis and gene expression during tomato fruit ripening.
3	2020	Nature Communications	Carotenoids modulate kernel texture in maize by influencing amyloplast envelope integrity.

Sample Requirements

	Sample type	Minimum Sample	Minimum Risk Sample Size	Biological Repetition
Plant tissues	Stems, buds, nodes, leaves, flowers, fruits, roots, healing tissues	600mg	300mg	3-6



Innovative Metabolomics Insights for Better Health



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