

Phytohormone Targeted Assay

Phytohormone is also known as plant natural hormone or plant endogenous hormone. It refers to some trace organic compounds produced in plants that can regulate (promote or inhibit) their own physiological processes. Based on LC-MS/MS technology, MetwareBio has developed a sensitive method for the plant hormone detection, covering **108** phytohormones including ABA, Auxin, CK, ACC, GA, JA, SA and SL.



Complete Variety

108 plant hormones



Extensive Experience

More than **2000** project experiences covering **500+** species



High Sensitivity

AB Sciex QTRAP 6500 LC-MS platform, ng/g level



Quantitative Accuracy

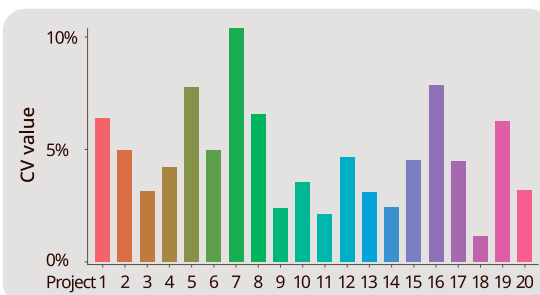
External standard + Internal standard method, $r > 0.99$

List of Metabolites

Products	Compounds List
Phytohormone family bucket (108 compounds)	Auxin (27) <chem>CC(=O)Oc1ccc(O)cc1</chem> Jasmonates (11) <chem>CC(=O)OCC(=O)O</chem> Cytokinins (40) <chem>NC1=NC=NC=C1N</chem> Abscisic Acid (3) <chem>CC1=CC(=C(C=C1)O)C(=O)O</chem>
GAs (18 compounds)	Salicylates (6) <chem>OC(=O)c1ccc(O)cc1</chem> ACC (1) <chem>CC(=O)O</chem> Strigolactones (2) <chem>CC1=CC(=C(C=C1)O)C(=O)O</chem> Gibberellins (18) <chem>CC1=CC(=C(C=C1)O)C(=O)O</chem>
	GA ₁ /GA ₃ /GA ₄ /GA ₅ /GA ₆ /GA ₇ /GA ₈ /GA ₉ /GA ₁₅ /GA ₁₉ / GA ₂₀ /GA ₂₄ /GA ₂₉ /GA ₃₄ /GA ₅₁ / GA ₅₃ /GA ₁₂ -ald/GA ₄₄

High Stability

The detected metabolites showed a coefficient of variation (CV) of less than 11% in mixed QC samples.



Selected Publications

Year	Journal	Title	Species
2023	Journal of Experimental Botany	Transcriptomic and metabolic profiling of watermelon uncovers the role of salicylic acid and flavonoids in the resistance to cucumber green mottle mosaic virus	Watermelon
2023	Horticulture Research	Multifaceted regulatory functions of CsBPC2 in cucumber under salt stress conditions	Cucumber
2023	Nature Plants	Balanophora genomes display massively convergent evolution with other extreme holoparasites and provide novel insights into parasite-host interactions	Balanophora
2023	Nature Communications	UDP-glucosyltransferase OsUGT75A promotes submergence tolerance during rice seed germination	Rice
2023	Plant Physiology	Plant extracellular self-DNA inhibits growth and induces immunity via the jasmonate signaling pathway	Arabidopsis
2022	Nature Communications	Variation in the fruit development gene POINTED TIP regulates protuberance of tomato fruit tip	Tomato
2021	New Phytologist	Genetic variation in YIGE1 contributes to ear length and grain yield in maize	Maize
2020	Nature Communications	UDP-glucosyltransferase regulates grain size and abiotic stress tolerance associated with metabolic flux redirection in rice	Rice
2020	Cell	Genomes of the banyan tree and pollinator wasp provide insights into fig-wasp coevolution	Banyan tree



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