

Plant & Soil



What are the difficulties in Plant DNA/RNA extractions ?

- Rigidity of the cell wall composition
- Chemical heterogeneity of Metabolites
- Pigments like chlorophyll, xanthophyll etc.
- Inhibitors like Polyphenols, Oxidizable quinones, Tannins

Do We have solution ?.....YES

Himedia's Molecular Biology division is dedicated to provide solution to overcome the difficulties in plant extraction to obtain

- **Inhibitor Free**
- **Ultra Pure**
- **Real Time PCR Amplifiable Nucleic Acids**

Our Soil DNA Extraction kits yield Excellent quality DNA for studies of Soil Microbiome



MBIN005 - Insta NX® Plant Genomic DNA Kit

Sr. No.	Plant Species Processed
1	Garlic bulb
2	Groundnut seed
3	Millet seed
4	Onion bulb
5	Onion leaf

Sr. No.	Plant Species Processed
6	Rice plant root
7	Soyabean leaf
8	Soyabean seed
9	Watermelon seed
10	Amaranth seed

MBIN016 - Insta NX® SuperPlant DNA Kit

Sr. No.	Plant Species Processed
1	Mango leaf
2	Mangroves
3	Pomegranate endocarp

Sr. No.	Plant Species Processed
4	Pomegranate exocarp
5	Pomegranate fruit
6	Sugarcane leaf

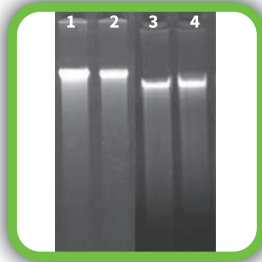


Automation In Plant Molecular Biology

LA1056 - Insta NX[®] AUTOMATED DNA EXTRACTOR

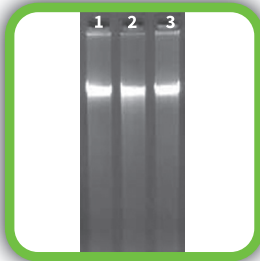
Garlic DNA

Lane	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	37.61	1.77
2	36.61	1.76
3	37.25	1.72
4	33.30	1.76



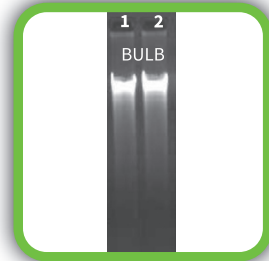
Soyabean DNA

Lane	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	312.7	1.82
2	325.6	1.72
3	397.4	1.81

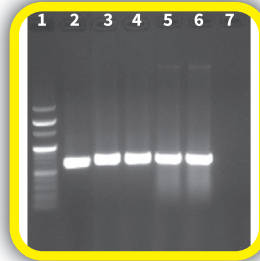
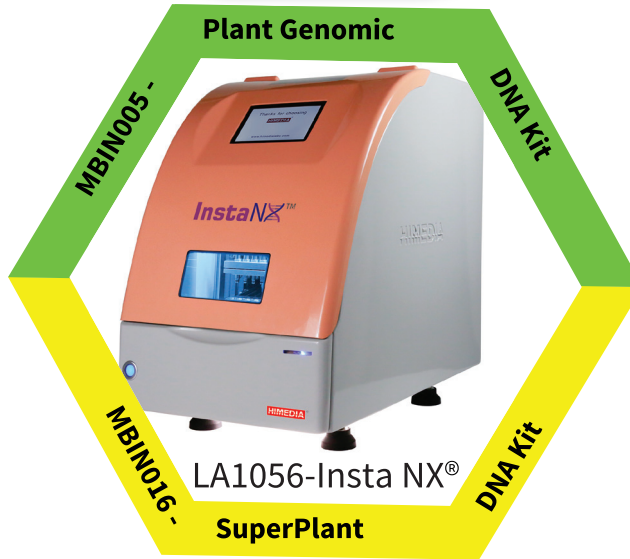


Onion DNA

Lane	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	35.27	1.72
2	31.63	1.76

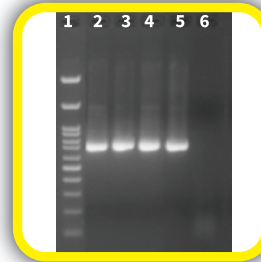


Plant Genomic



Oil Palm leaf PCR

Lane	Samples
1	100 bp Ladder
2-5	DNA from Oil palm
6	Positive control
7	Negative control



Mango Leaf DNA

Lane	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	17.6	1.25
2	15.8	1.24

Pomegranate Fruit Exocarp & Endocarp PCR

Lane	Samples
1	100 bp Ladder
2-3	DNA from Exocarp
4-5	DNA from Endocarp
6	Negative control

MB507 - Plant Genomic DNA Kit

Protocol Type : ● Soft Tissue ● Soft Tissue with PVP ● Oil seed Protocol ● Hard Tissue

Sr. No.	Plant Species Processed		Sr. No.	Plant Species Processed		Sr. No.	Plant Species Processed	
1	Amaranth seed	●	26	Eucalyptus leaf	●	50	Rice leaf	●
2	Arabidopsis leaf	●	27	Fern leaf	●	51	Rice seed	●
3	Artemisia leaf	●	28	Frozen Tulsi leaf (3 months)	●	52	Rice root	●
4	Ashwagandha leaf	●	29	Groundnut seed	●	53	Rubber plant leaf	●
5	Balsamina leaf (Terda)	●	30	Jatropha leaf	●	54	Sesame seeds	●
6	Bamboo leaf	●	31	Jatropha seed	●	55	Sorghum leaf	●
7	Basil leaf	●	32	Lemon grass leaf	●	56	Soyabean leaf	●
8	Banyan tree leaf	●	33	Lemon Exocarp	●	57	Soyabean seed	●
9	Beetroot leaf	●	34	Marigold petals	●	58	Sesame seed	●
10	Cabbage leaf	●	35	Millet seed	●	59	Sugarcane leaf	●
11	Castor seed	●	36	Mint leaf	●	60	Syngonium root	●
12	Casuarina leaf	●	37	Mulberry leaf	●	61	Tobacco leaf	●
13	Chick pea leaf	●	38	Musk melon leaf	●	62	Texas Baccata leaf	●
14	Chilly seed	●	39	Mustard seed	●	63	Tea Leaves (fresh)	●
15	Chrysanthemum leaf	●	40	Neem leaf (Melia dubia)	●	64	Tea leaves (processed)	●
16	Citrus leaf	●	41	Oil Palm Leaf	●	65	Tobacco leaf	●
17	Coconut leaf	●	42	Okra leaf (Bhendi)	●	66	Tomato Leaf	●
18	Coffee seed	●	43	Onion bulb	●	67	Tomato seed	●
19	Corn seed	●	44	Onion leaf	●	68	Turmeric rhizome (wet)	●
20	Coriander leaf	●	45	Onion seed	●	69	Water melon leaf	●
21	Cotton seed (Bt and non Bt)	●	46	Picrorhiza	●	70	Watermelon seeds	●
22	Curry leaf (kadi patta)	●	47	Potato leaf	●	71	Wheat leaf	●
23	Dalbergia leaf	●	48	Pumpkin seed	●			
24	Date Palm leaf	●	49	Radish root	●			
25	Egg plant leaf	●						

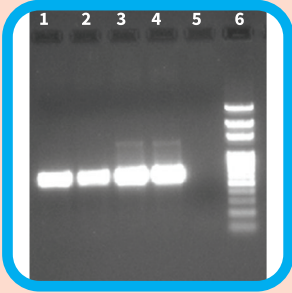
MB571 - SuperPlant Genomic DNA Kit

Sr. No.	Plant Species Processed
1	Banana leaf
2	Cotton lint
3	Mango leaf
4	Mangroves
5	Oil Palm Leaves
6	Grape Leaf
7	Coconut Leaf

Sr. No.	Plant Species Processed
8	Pickle sample
9	Picrorhiza
10	Pine leaf
11	Pomegranate exocarp
12	Pomegranate leaf
13	Sugarcane leaf

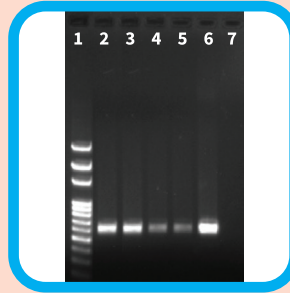
MB507 - HiPurA® Plant Genomic DNA Extraction Kit

Rubber leaf PCR



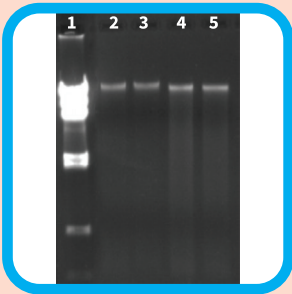
Lane	Sample
1, 2	Rubber leaf
3, 4	Positive control
5	Negative control
6	100bp ladder

Cotton lint fiber PCR



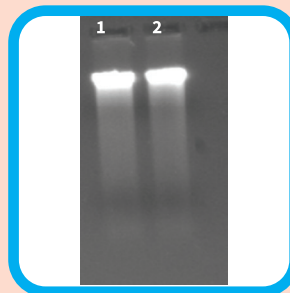
Lane	Sample
1	100bp ladder
2-5	Cotton lint samples
6	Positive Control
7	Negative Control

Marigold Petals and Coffee seed PCR



Sr. no.	Sample	Yield (ng/μl)	Purity (A_{260}/A_{280})
1	Marigold	12.1	1.72
2	Marigold	13.9	1.86
3	Coffee	15.3	1.69
4	Coffee	15.5	1.89

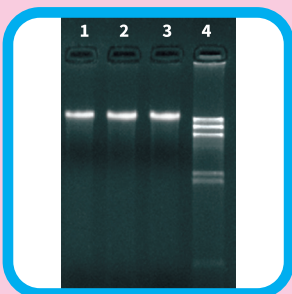
Tea leaf DNA



Sr. no.	Samples	Yield (ng/μl)	Purity (A_{260}/A_{280})
1	Tea leaf	23.1	1.90
2	Tea leaf	25.0	1.89

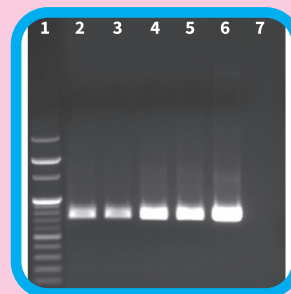
MB571 - HiPurA® SuperPlant DNA Purification Kit

Grape leaf DNA



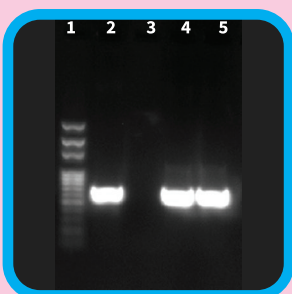
LANE	Yield (ng/μl)	Purity (A_{260}/A_{280})
1	34.4	1.66
2	33.6	1.74
3	34.2	1.76

Mangrove leaf PCR



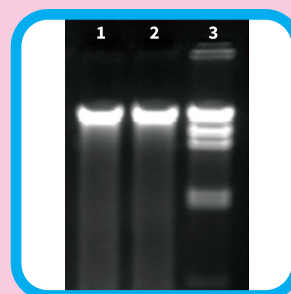
LANE	SAMPLES
1	100 bp Ladder
2-3	Mangrove
4-5	Mangrove
6	Positive control
7	Negative control

Safflower leaf PCR



LANE	SAMPLES
1	100 bp Ladder
2	Positive control
3	Negative control
4	Safflower leaf
5	Safflower leaf

Mulberry leaf DNA

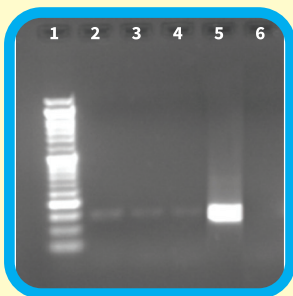


Samples	Yield (ng/μl)	Purity (A_{260}/A_{280})
1	56.1	1.87
2	46.2	1.88

MB567 - HiPurA[®] Spice DNA Purification Kit

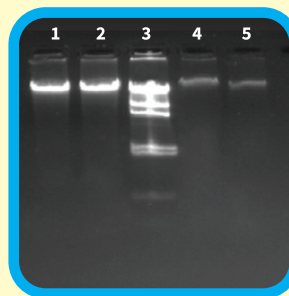
MB561 - HiPurA[®] Marine Algae DNA Purification Kit

PCR of Pickle



Lanes	Sample
1	100bp ladder
2-4	Pickle sample
5	Positive control
6	Negative control

Marine algae



Samples	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	199.7	1.12
2	244.4	1.11
4	95.1	1.05
5	76.7	1.02

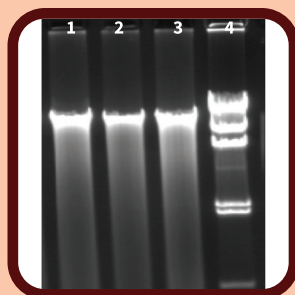
MB542 - HiPurA[®] Soil DNA Purification Kit

Vermicompost Soil PCR



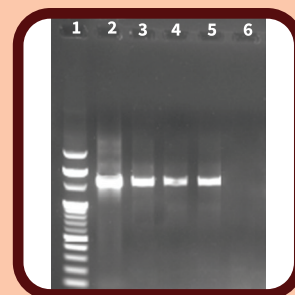
Lane	Samples
1	100 bp Ladder
2-3	Vermicompost
4	Positive Control
5	Negative Control

Geranium Compost Soil DNA



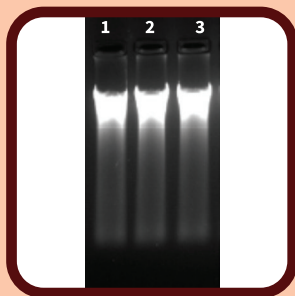
Samples	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	55.4	1.74
2	55.8	1.71
3	44.3	1.65
4	Lambda Hind III ladder	

Mine Soil PCR



Lane	Samples
1	100bp ladder
2	Positive control
3-5	Mine Soil
6	Negative Control

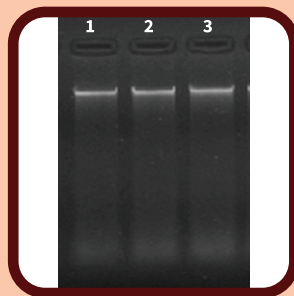
Peaty Soil PCR



Samples	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	134.5	1.85
2	129.5	1.82
3	108.1	1.82

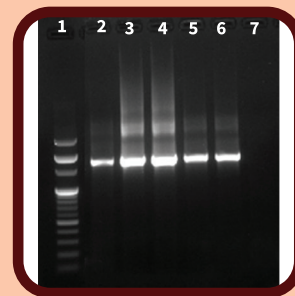
Automated Extraction using MBIN009 Kit

Loamy Soil DNA



Samples	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	34.00	1.69
2	25.14	1.68
3	40.78	1.79

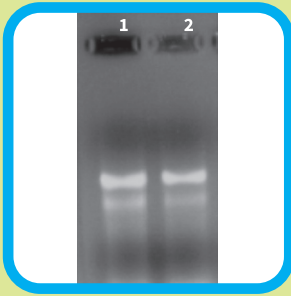
Marine sediment PCR



Lane	Samples
1	100bp ladder
2	Positive control
3-4	Marine sediment 1
5-6	Marine sediment 2
7	Negative control

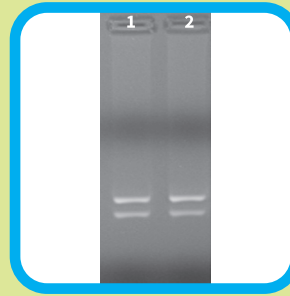
MB601 - RNA-XPress™ Reagent

Tomato fruit RNA



Lanes	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₈₀)
1	401.9	1.81
2	274.1	1.80

Apple Pulp RNA



Lanes	Yield (ng/μl)	Purity (A ₂₆₀ /A ₂₃₀)
1	26.78	2.01
2	27.08	2.19

MBT126 - InstaDNA™ Card - Rapid Plant DNA Extraction



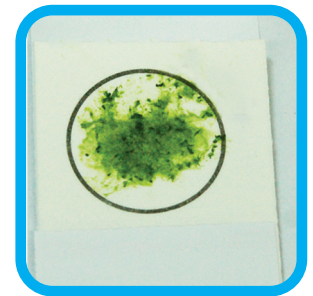
InstaDNA™ Card



Avoid midrib, vein of leaf



Crush lamina on card



Process for extraction

- Card is impregnated with chemicals that lyse Cell Membranes.
- Physically entrapped immobilized DNA can be stored and shipped at Room Temperature.

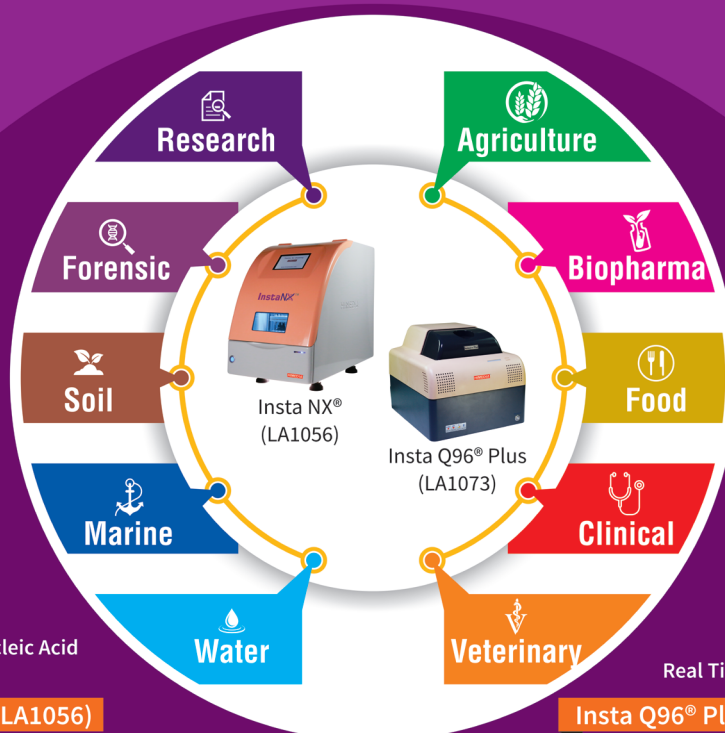
Himedia's Offers you a broad range of Plant Extraction Kits based on three principles

Sr. No.	Code	Name of Kit	Principle
1	MB507	HiPurA® Plant Genomic DNA Miniprep Purification Kit	●
2	MBIN005	Insta NX® Plant Genomic DNA New Purification Kit	●
3	MB571	HiPurA® SuperPlant DNA Purification Kit	●
4	MBIN016	Insta NX® SuperPlant DNA Purification Kit	●
5	MB502	HiPurA® Plant DNA Isolation Kit (CTAB Method)	●
6	MB528	HiPurA® Cotton DNA Isolation Kit	●
7	MB533	HiPurA® Banana DNA Isolation Kit	●
8	MB561	HiPurA® Marine Algae DNA Purification Kit	●
9	MB567	HiPurA® Spice DNA Purification Kit	●
10	MB542	HiPurA® Soil DNA Purification Kit	●
11	MBIN009	Insta NX® Soil DNA Purification Kit	●
12	MB603	HiPurA® Plant & Fungal RNA Purification Kit	●

- Solution Based
- Column Based
- Automated Extraction

Sr. No.	Code	Relevant Product Codes
1	MB611	HiPurA® Yeast RNA Purification Kit
2	MB529	HiPurA® Insect DNA Purification Kit
3	MB508	HiPurA® Plasmid DNA Miniprep Purification Kit
4	MB539	HiPurA® Quick Gel Purification Kit
5	MB563	HiPurA® PCR Product and Gel Purification Combo Kit
6	MBPCR063	GMO Detection Kit (SYBr Based)
7	MBPCR189	Plant Detection Kit (Universal SYBr Based)
8	MBPCR097	Fungal ITS PCR Kit (SYBr Based)
9	MBT076	Hi-cDNA Synthesis Kit
10	MBT138	HiScript Two Step RT-PCR Kit
11	Chemicals	MB010 - SDS, MB102 - PVP, MB101 - CTAB
		MB143 - Nonidet® P-40, MB067 - Tween® 20
12	Buffers	ML007 - 20% SDS

One Stop Automated Molecular Solution



Automated Nucleic Acid Extractor

Insta NX® (LA1056)

- Automated DNA/RNA Extraction
- ↳ Innovative Super-S Membrane
- ↳ Integrated UV Sterilization
- Prefilled Cartridges
- Excellent Yield & Purity
- Cross Contamination Free

Real Time PCR System

Insta Q96® Plus (LA1073)

- ↳ Real-Time PCR-Truly Open System
- ↳ Sensitivity-One Copy Detection
- ↳ Auto Gain Intensity Feature
- ↳ Robotic Bottom Based Detection System
- ↳ No ROX dye relative quantification
- ↳ Automated relative quantification
- ↳ No calibration required

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