

Gsure Plant DNA Isolation Kit with WLN Buffer



Advantage

WLN Buffer: WLN stands for without liquid nitrogen. WLN Buffer is so robust and active that only crushing the plant tissues in presence of this buffer is enough to lyse the cell and release of genomic DNA. The buffer components immediately deactivates cellular nucleases, thus protects the genomic DNA. So the tissue should be crushed in presence of the WLN buffer. DNA isolation is equally efficient from different tissues. Plant DNA Isolation has some unique challenges which require a specialized isolation kit that can isolate gDNA from any sort of plant tissues irrespective of its mucilage, phenolic, silica or carbohydrates and other components abundant in plant tissues. Plant cell walls are very difficult to disrupt mechanically, hence good isolation demands complete disruption of cell wall. For compatibility of all sorts of down stream application, isolated DNA should be of good quality and free of any kind of plant secondary metabolites. GSure Plant DNA Isolation Kit With WLN Buffer is the easiest solution of all these problems. It delivers huge amount of genomic DNA from considerably low amount of plant tissue. Isolated DNA is compatible for restriction digestion, PCR amplification and next gen sequencing. The kit ensures efficient and rapid isolation from any sorts of plant tissue. Isolation is equally possible from leaf, root, seeds and fruit. Plant tissue samples could be stored at -80°C for long time and almost equally, efficient genomic DNA isolation is possible from stored plant tissues using GSure Plant DNA Isolation Kit. There are some exceptions, like Maize leaves, on storage, shows apoptotic degradation of genomic DNA. Hence, isolation of high molecular weight genomic DNA from stored maize leaves is hardly possible. It is also reported that isolation of genomic DNA is very much inefficient from medicinally important plants due to high content of secondary metabolites.

Gsure Plant DNA Isolation Kit contains 3 lysis buffers which assure complete enzymatic lysis of cells and digestion of contaminating proteins. Wash buffer supplied with the kit confirms complete removal of proteins and contaminants from the silica membrane. Optimized protocol guaranties extremely purified genomic DNA isolation reproducibly irrespective of the sample source. GSure Plant DNA Isolation Kit is so robust that it can isolate genomic DNA not only from plant leaves but also from plat seed and root too. Buffers provided with the GSure Plant DNA Isolation Kit assure complete lysis of cells and digestion of cellular proteins. Buffers are already doped with RNase A and Proteinase K, thus external addition of these components are not required. All the buffers should be stored at room temperature. Prescribed volume of absolute ethanol is to be added with the wash buffer before starting the work.

Introducing WLN buffer: This specially formulated efficient lysis buffer is an optimal choice for lysis of plant tissues (leaf, seed etc.) Without Liquid Nitrogen. Addition of WLN buffer and an incubation at -20°C is enough for cell lysis and efficient DNA isolation using Gsure Plant Mini Kit.

- ❑ Without Using without Using Liquid Nitrogen Highly Purified gDNA from 25mg Plant Tissue in 45 min.
- ❑ Plant genomic DNA isolation, no liquid nitrogen required- globally first time.
- ❑ Extremely strong lysis buffer, could isolate gDNA from leaf, root or even from seed-all without liquid nitrogen.
- ❑ No need of liquid nitrogen, not even any freezing step require. Crush the tissue in buffer and proceed.
- ❑ Wide range of sample: Leaf, Root, Seed, Fruit.
- ❑ Equally efficient on differently stored plant tissues.
- ❑ Could isolate gDNA from processed seeds.
- ❑ Does not retain secondary metabolites in the eluted DNA.
- ❑ Isolated DNA is compatible for all sorts of downstream application. e.g.: PCR, Restriction digestion and southern blot, Next gen sequencing etc.

Features

- ✓ **Unique-** No need of liquid nitrogen, even no freezing step is required.
- ✓ **Fast-** less than one hour required.
- ✓ **Easy-** spin column format.
- ✓ **Convenient-** Same optimized protocol for different sources of sample.
- ✓ **High yield-** Recovers 3-5 μg total gDNA from 25mg Plant tissue.
- ✓ **Reproducible-** Delivers almost equal amount of yield on every isolation.
- ✓ **Easy to use-** No requirement of addition of RNase A or Proteinase K externally.
- ✓ **EcoFriendly-** Minimum number of steps, thus minimum number of plastic ware required.

Note:

- ↻ Never start with high amount of plant tissue.
- ↻ Reconstitute wash buffer with absolute alcohol.
- ↻ Always use molecular biology grade ethanol.
- ↻ Never forget to set free spin before elution.
- ↻ Always use nuclease free water (provided with the kit) to elute the DNA.