Product Information Sheet for NR-44092

Genomic DNA from Rosary Pea (*Abrus precatorius*) Seedlings

Catalog No. NR-44092

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For research use only. Not for human use.

Contributor and Manufacturer:

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Product Description:

Genomic DNA was extracted from a preparation of rosary pea (*Abrus precatorius*) seedling leaves using the Qiagen® DNeasy® Plant Mini Kit.

Rosary pea is a vine, native to the Old World tropics, but now known to grow throughout the tropical and subtropical areas of the world. The plant is best known for its seeds, which are toxic due to the presence of abrin toxin. The leaves have been used to make a tea for treatment of fevers, coughs, and colds.[1]

Abrin toxin is a member of the ribosome inactivating protein (RIP) family of toxins, which specifically and irreversibly inhibit protein synthesis in eukaryotic cells by enzymatically altering the 28S rRNA of the large 60S ribosomal subunit. Most RIPs are produced by plants and are thought to represent a defense mechanism against viral or parasitic attackers. Examples of plant-derived RIPs include ricin, abrin and saporins.[2]

NR-44092 has been qualified for PCR applications by amplification of the A chain and B chain gene segments of abrin toxin.

Material Provided:

Each vial contains approximately 2 µg of genomic DNA, dried from a 50 µL solution containing 10 mM Tris-HCl and 0.5 mM EDTA, pH ~ 9. The vial should be centrifuged prior to opening.

Note: NR-44092 should be rehydrated with molecular grade water.

Packaging/Storage:

NR-44092 was packaged aseptically in screw-capped plastic cryovials. The product is shipped at room temperature and can be stored at 4°C or colder immediately upon arrival.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic DNA from Rosary Pea (*Abrus precatorius*) Seedlings, NR-44092."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

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References:

1. Gul, M. Z. et al., "Antioxidant and Antiproliferative Activities of *Abrus precatorius* Leaf Extracts - An *in vitro* Study." BMC Complement. Altern. Med. 13 (2013): 53. PubMed: 23452983.
2. Walsh, M. J., J. E. Dodd and G. M. Hautbergue. "Ribosome-Inactivating Proteins: Potent Poisons and Molecular Tools." Virulence 4 (2013): 774-784. PubMed: 24071927.

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