

Complementary DNA Synthesized from *Schistosoma mansoni*, Strain NMRI, Infected Mouse MicroRNA (acute)

Catalog No. NR-48854

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Contributor and Manufacturer:

Michael H. Hsieh, M.D., Ph.D., Stirewalt Endowed Director, Biomedical Research Institute, Rockville, Maryland, USA (NIH-NIAID Contract HHSN2722010000051)

Product Description:

Complementary DNA (cDNA) was synthesized from microRNA (miRNA) extracted from pooled plasma of mice infected for 3 weeks with *Schistosoma mansoni* (*S. mansoni*), strain NMRI.

miRNAs are members of a rapidly growing class of small non-coding RNAs, 19 to 23 nucleotides in length, that are present in a highly stable cell-free form in body fluids of animals. miRNAs play an important role in disease and can serve as biomarkers of *Schistosoma* infection.¹ miRNA was obtained from uninfected mouse plasma using the NucleoSpin[®] miRNA Plasma kit (Clontech) which is designed for the isolation of short RNA species from cell free blood plasma or serum. cDNA was synthesized from the miRNA with the Mir-X[™] miRNA First-Strand Synthesis Kit (Clontech). In the synthesis reaction, miRNAs are poly(A)-tailed using poly(A) polymerase, and then copied using a modified oligo(dT) primer and reverse transcriptase.

Material Provided:

Each vial of NR-48854 contains approximately 1 µg of cDNA in DNase/RNase-free distilled water. The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-48854 was packaged in cryovials. The product is provided frozen and should be stored at -20°C or colder upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was provided by the NIAID Schistosomiasis Resource Center for distribution through BEI Resources, NIAID, NIH: Complementary DNA Synthesized from *Schistosoma mansoni*, Strain NMRI, Infected Mouse MicroRNA (acute), NR-48854."

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/biosafety/publications/bmbl5/index.htm.

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References:

- Hoy, A. M., et al. "Parasite-Derived MicroRNAs in Host Serum as Novel Biomarkers of Helminth Infection" PLoS Negl. Trop. Dis. 8 (2014): e2701. PubMed: 24587461.

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