Top-Bio s.r.o.

Tel: +420 603 476 934
E-mail: top-bio@top-bio.cz
www.top-bio.com

CERTIFICATE OF ANALYSIS

Product: Carrier-iRNA

Catalog No: C078, C079

Lot No: C078122026

Date of Expiry: 12/2026

Composition: Synthetic RNA homopolymer (polyinosinic acid) in sterile water (18 Mohm.cm; ~10 mg/ml).

Storage temperature: At temperature -20 ± 5°C. Material can be repeatedly defrosted.

Purity of polyinosinic acid: > 98% by TLC.

UV (Lambda max): 248,5 nm.

Functional Test:

Each batch of Carrier-iRNA is analyzed in several assays. For the assays, DNA or RNA is examined in the Carrier Assay Buffer (CAB): 10 mM Tris-HCl, 2 mM MgCl2, 1 mM dithiothreitol, pH 7.5 at 37°C.

Nucleic acid precipitation assay. Economy DNA marker (Cat. No. D071; 2.5 µl) is mixed with 0.2 ml 10 mM Tris buffer, pH 8.0 + 1 mM EDTA, 1 µl Carrier-iRNA, 20 µl of 3 M sodium acetate, pH 5.2, and 0.6 ml of 96% Ethanol. After 30 minutes at 2 - 8°C the mixture is centrifuged for 10 min at 12,000 x g, analyzed by electrophoresis in agarose gel with ethidium bromide and observed under UV light. More than 90% of all components of the DNA marker is recovered in the precipitate.

Nick activity assay. Plasmid pUC19 (1 µg) in 0.2 ml CAB is incubated with Carrier-iRNA (50 µg) for 4 hours at 37°C, followed by electrophoresis in agarose gel with ethidium bromide. No nicking activity is observed.

Ribonuclease assay. RNA (1 µg) in 50 µl CAB with Carrier-iRNA (50 µg) is incubated for 1 hour at 37°C, followed by electrophoresis in agarose gel with ethidium bromide. No changes in properties of RNA are observed under UV light.

Result: passed

FOR RESEARCH USE

APPROVED DATE: 17.10.2024

Manager: Hana Těšitelová