

HighYield T7 ARCA mRNA Synthesis Kit (me1Ψ-UTP), L pack

Synthesis of ARCA-capped & N1-Methylpseudouridine-modified (m)RNA

HighYield T7 ARCA mRNA Synthesis Kit (me1Ψ-UTP) is designed to produce large amounts of ARCA-capped and N1-Methylpseudouridine-modified (m)RNA via in vitro transcription with T7 RNA polymerase. The resulting 5'-capped and internally modified (m)RNA can subsequently be used for microinjection, transfection or in vitro translation experiments. Anti-reverse cap analog (ARCA, m7,3'-OGpppG)-capped (m)RNA possesses a significantly higher translation efficiency compared to traditional m7GpppG-capped (m)RNA. This is due to 3'-O-methylation of the m7 guanine moiety that allows ARCA incorporation in the correct ("anti-reverse") orientation only resulting in a 100 % translatable capped (m)RNA population. N1-Methylpseudouridine modifications have been shown to increase (m)RNA stability and to reduce immunogenicity. The kit contains sufficient reagents for 15 reactions (S-Pack) or 50 reactions (L-Pack) à 20 µl (6 mM ARCA, 1.5 mM GTP, 7.5 mM N1-Methylpseudo-UTP, 7.5 mM ATP, 7.5 mM CTP). An individual optimization of ARCA and N1-Methylpseudo-UTP concentration can easily be achieved with the single nucleotide format. A 20 µl reaction yields about 30-50 µg RNA after 30 min incubation (1 µg T7 control template, 1.4 kb RNA transcript). Yields may however vary depending on the template (promotor design, sequence length, secondary structure formation)).

Ordering Information

[Order Online »](#)

JBS-RNT-115-L	50Reactions
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Manuals, SDS & CofA

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Handling & Storage

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Technical Info / Product For the Original Manufacturer's data sheet please [click here](#).

Notes



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