

HighYield T7 RNA Crosslinking Kit (4- Thio-UTP)

Synthesis of 4-Thio-modified RNA

HighYield T7 RNA Crosslinking Kit (4-Thio-UTP) is designed to produce randomly 4-Thio-modified RNA probes via in vitro transcription. Such probes are ideally suited for the detection of RNA-Protein interactions by photocrosslinking. The photoreactive Thio group triggers the formation of a covalent bond between the RNA and closely interacting proteins upon UV irradiation. 4-Thio-UTP is efficiently incorporated into RNA as substitute for its natural counterpart UTP using an optimized reaction buffer and T7 RNA Labeling Polymerase Mix. 80 % 4-Thio-UTP substitution typically results in an optimal balance between reaction and labeling efficiency. Individual optimization of 4-Thio-UTP/UTP ratio however, can easily be achieved with the single nucleotide format. The resulting 4-Thio-modified RNA probe can be used for photocrosslinking experiments using a 365 nm UV light. The kit contains sufficient reagents for 15 labeling reactions of 20 μ l each (100 % 4-Thio-UTP substitution, 7.5 mM ATP, 7.5 mM GTP, 7.5 mM CTP, 7.5 mM 4-Thio-UTP). A 20 μ l reaction with 100 % substitution yields about 10 μ g RNA, with 80 % substitution about 50 μ g RNA after 30 min incubation (1 μ g 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-135	15Reactions
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Manuals, SDS & CofA

[View Online »](#)

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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