In Vitro Transcription Portfolio

SignalChem Diagnostics' In Vitro Transcription Portfolio offers high-purity, high-performance GMP-grade enzymes, kits, and reagents designed to support efficient, scalable RNA synthesis. Developed under stringent Good Manufacturing Practice (GMP) standards, these products enable precise control over RNA production workflows for a diverse range of applications.

GMP-Grade Enzymes

Name	Catalog #	Description
Murine RNase Inhibitor, GMP-Grade (40 U/µL)	RNI02-X55A	Oxidation-resistant recombinant mouse RNase inhibitor that specifically inhibits RNases A, B, and C.
Inorganic Pyrophosphatase, GMP-Grade (0.1 U/µL)	PYR01-E59C	Catalyzes the hydrolysis of inorganic pyrophosphate into orthophosphate and can be used to improve RNA yield. Supplied at 0.1 U/µL.
Inorganic Pyrophosphatase, GMP-Grade (1 U/µL)	PYR02-E59C	Catalyzes the hydrolysis of inorganic pyrophosphate into orthophosphate and can be used to improve RNA yield. Supplied at 1 U/µL.
mRNA Vaccinia Capping Enzyme, GMP-Grade (10 U/µL)	VAC01-E59B	Catalyzes the formation of a cap structure at the 5' end of synthesized mRNA, used to enhance its stability and translation efficiency.
mRNA Cap 2'-O-Methyltransferase, GMP-Grade (50 U/µL)	MET01-E59B	Catalyzes the formation of the Cap1 structure, which enhances mRNA translation efficiency.
T7 RNA Polymerase, GMP-Grade (50 U/µL)	T701-E51B	Designed for efficient in vitro transcription of RNA from DNA templates containing a T7 promoter. Supplied at 50 U/µL.
T7 RNA Polymerase, GMP-Grade (250 U/µL)	T702-E51B	Designed for efficient in vitro transcription of RNA from DNA templates containing a T7 promoter. Supplied at 250 U/µL.
T7 RNA Polymerase, Low dsRNA, GMP-Grade (250 U/µL)	T703-E51B	Optimized for in vitro transcription with minimal dsRNA byproducts and used for RNA synthesis from linearized plasmids or PCR products.
RNase R, GMP-Grade (20 U/µL)	RNR01-E59C	Magnesium-dependent 3' → 5' exoribonuclease that selectively degrades linear RNA but does not degrade circular and highly structured RNAs.
DNase I, GMP-Grade (2 U/µL)	DE01-E59C	Digests both ssDNA and dsDNA, used to remove DNA contaminants from RNA and protein samples for optimal purity in downstream applications.

SPECIAL PRICING IS AVAILABLE FOR BULK ORDERS

For other product inquiries, please contact us at orders@signalchemdx.com

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Kits and Reagents

Name	Catalog #	Description
10X Transcription Buffer, GMP-Grade	TBF01-B59A	Reaction buffer optimized for efficient in vitro RNA synthesis.
10X Digestion Buffer, GMP-Grade	DF01-B59A	Formulated to optimize the activity of various enzymes used in RNA and DNA digestion processes.
10X RNase R Reaction Buffer, GMP-Grade	RBF01-B59A	Designed to optimize the activity of RNase R, an enzyme used to degrade linear RNA while preserving circular and highly structured RNAs.
T7 High-Yield RNA Synthesis Kit	T702-K598	In vitro transcription kit with T7 RNA Polymerase for short and long RNA transcript synthesis.
NTP Solution Set (100 mM)	NT01-M29A	Four separate solutions (ATP, CTP, GTP, and UTP), each at a concentration of 100 mM, with ≥99% purity, and free of DNase and RNase.

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