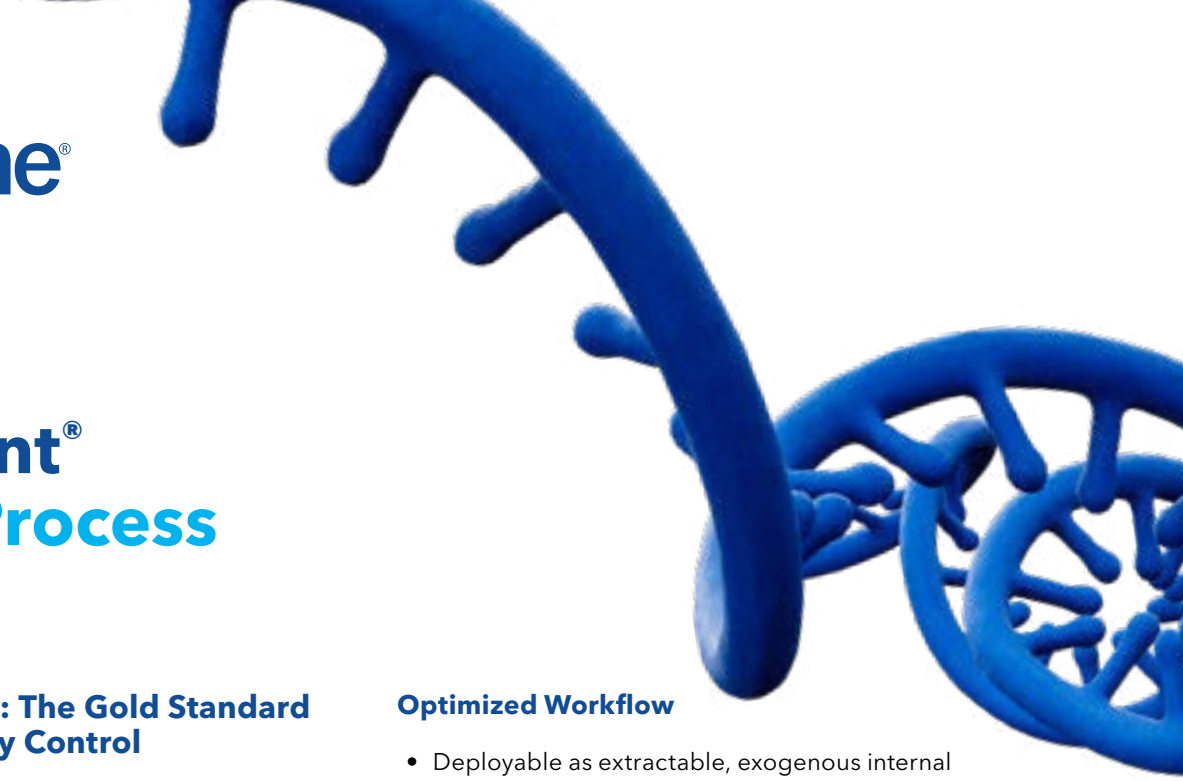
bio-techne®



Armored RNA Quant® Internal Process Control*

Armored RNA Quant: The Gold Standard For Molecular Quality Control

Armored RNA® technology stabilizes and protects nucleic acids from nuclease degradation by packaging them in a protective protein coat. Armored Controls have been utilized in IVD-cleared assays for more than 20 years and continue to serve as an important tool in the rapidly evolving space of molecular diagnostics. For methods ranging from qPCR to NGS there is now a convenient and inexpensive way to monitor the performance of your assay with the Armored RNA Quant® Internal Process Control.

- Used as an onboard process control to monitor extraction through detection.
- Non-specific, 1,000 nucleotide IVT RNA (alien/non-homologous) sequence.
- Encapsulated in a coat of protein dimer armor which renders it resistant to degradation.
- Used as a spike-in to sample (e.g., urine, blood, CSF, plasma/liquid biopsy) to monitor the overall efficiency of your process.

Reduced Complexity

- Incorporates a 1,000nt, non-coding, non-specific alien sequence.
- Simple, spike-in solution to monitor extraction and process efficiency.
- Compatible with new and existing RNA-based clinical assays.
- Non-infectious, synthetic constructs simplify shipping and storage.
- Available as a standalone catalog item.

Optimized Workflow

- Deployable as extractable, exogenous internal positive control.
- Non-competitive sequence will not interfere with amplification/detection of target(s).
- Degradation resistant in majority of biological matrices.
- Multiple volume and manufacturing options available.
- Available as cGMP or development lot in a range of fill volumes.

Quality Performance

- Concentration determined using National Institute of Standards (NIST) traceable standard.
- Highly standardized, quality controlled manufacturing ensures reliability and consistency between lots.
- Manufactured in a cell-free system.

Armored RNA Quant Internal Process Control Product Details

- Encapsulated as non-infectious, nuclease-resistant, pseudo-viral particle.
- NIST traceability enables usage in standardization and reproducibility assessments.
- Concentration: Available up to $1x10^{11}$ cp/mL
- Buffer Composition: TSM III (10 mM Tris, 100 nM NaCl, 1 mM $MgCl_2$, 0.1% Gelatin, 0.3% Microcide III, pH 7.0)
- Storage at -15 to -30˚C

Armored RNA Quant Internal Process Control Target Sequence (1,000 bp):

GTACTGACGTAAAGTCACTATTTTTCGTGCAACGTAC
G T C T C G A T G T A C A A C T G C T C T A T T A C G
GTTCATTTTTTTTGTAGGGTTACGCGGCCAGATGACTC
CATCTTATCCCCTTGAAAACATTCTTATTTGTACGC
CATAGTGGCATCGCGGTTGGATATCAATCGTATTGGACG
CAAGCGCGCTCTACTCAGTTTATAAGACCGCCAAC
TATTTTCGCAAGATCAGTGTATTTACGCTGACTCCAGTG
GTGAAACTCCTAAGATCTGTTTAGCTATTGCGCCGTGC
GTTTATCAAATCGGGCTTCCCAACATTCATTCTTAGAAG
G A A G C T C G A T A G T T C A G A G C T G C G G A A G G C
CCAATTTCATATTATATGTATGAGCCTGTCAATACCTGCAC
CCACGAACACCACAGTGACTAGAGTATGAGAGGTCGAC
GATCTACGGATGGTGATGAGCACGGAGATCTAAGCGTG
GAAGTGGCTATATAGAGCAGATATATTATATGACGTACCA
GAGGATCACCTACTAAAAGACTTTTCGAGAATCTA
CACCTACTAGCAAGGGTAGCCGATTAGTGGATCATCTA
AGACATCAAGGCTCAAACTAATTTTACCATGGACGCTG
CATTTACGCTTGCACATTTTATGTTGGCAGCCTTTGCCGC
GGCACATAGCGATATCCCGTACCCGCTTTTCTTTAAGTTA
ATCGCCGATGATTGGCTCAATAATCGCCTCACTTGTGC
GATGACTAGCCAGGCGTTTCCCGCGTTTCTAGATATTATC
GCGCTTATATAGTATAGACGAGTACCCTTTGTTGTTATTG
CAGCACCCAACAGAACTAAGTAATCTTTAGGCTGCGGC
CGCTTAGGTGGCAGAAGATTTGCTCGATGTTCTCAAGTA
AAGGACGTCGGGGAGTTGACGGTTGGCAGGTAACGTAT
GGATCTTTAATATAATCTAGGCAACAAGTAAGGGCCATT
GAGCGCTTATATGCCGCAGTCT

References

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3. Okello JB, Rodriguez L, Poinar D, Bos K, Okwi AL, Bimenya GS, Sewankambo NK, Henry KR, Kuch M, Poinar HN. 2010. Quantitative assessment of the sensitivity of various commercial reverse transcriptases based on armored HIV RNA. PLoS One. 2010 Nov 10;5(11):e13931.

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Ordering Information

Product Description	Concentration	Part Number	Volume
Armored RNA Quant® Internal Process Control	$2x10^6$ cp/mL	49650	0.5mL

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4000-001 Rev C
5201703248_ASU_FL_IPC-RNA-Flyer_JR