Armored RNA Quant®
SARS-CoV-2 Panel

Armored controls have been used in IVD assays for more than 20 years and continue to serve as an important tool in the rapidly evolving space of molecular diagnostics.

In response to the worldwide outbreak of COVID-19, Asuragen has developed a novel Armored RNA control panel that targets the SARS-CoV-2 viral nucleocapsid (N), envelope (E), RNA-dependent RNA polymerase (RdRp), Open Reading Frame sequence (ORF1), and human RNase P regions. This all-in-one panel aligns with the CDC and WHO recommended regions for testing providing a stable, reliable, and safe way to rapidly test for the presence of the novel Coronavirus with confidence.

Each control encodes *in vitro* transcribed RNA encapsulated in a protective protein coat to create a virus-like particle resistant to nuclease degradation. The product is suitable for use as an RNA extraction control, process quality control, or positive diagnostic reference controls. From feasibility to clinical use, this robust and versatile control is beneficial across all sectors of the research and diagnostic spectrum.

Armored RNA Quant®
THE GOLD STANDARD FOR MOLECULAR QUALITY CONTROL

REDUCED COMPLEXITY
- Available as standalone catalog item
- High-quality solution to monitor extraction and process efficiency
- Compatible with a wide range of RNA-based clinical assays
- Non-infectious, synthetic constructs simplify shipping and storage

OPTIMIZED WORKFLOW
- Deployable as extractable, exogenous internal positive control
- Tailored sequences specific to SARS-CoV-2 and RNase P
- 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

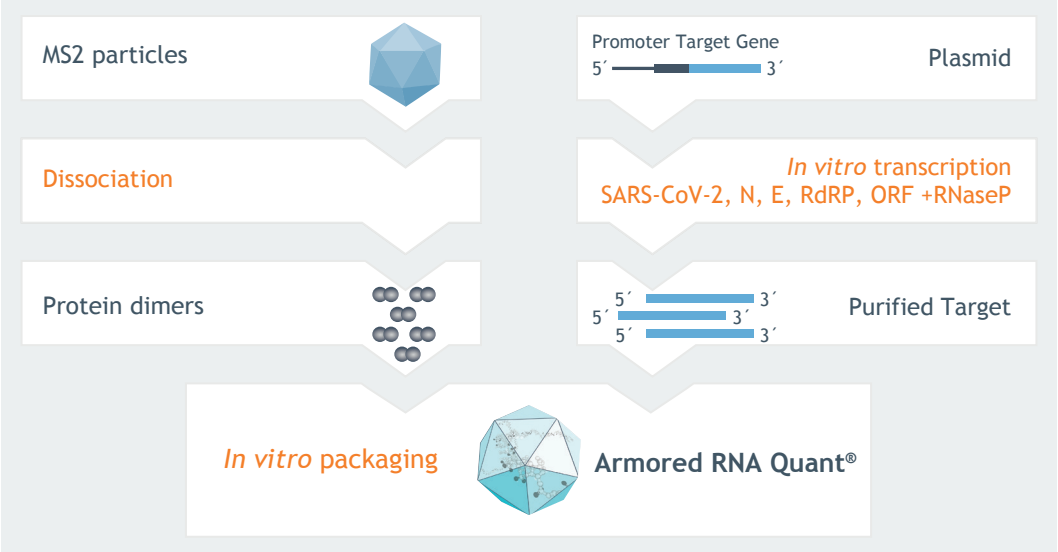
Asuragen®

Armored RNA Quant® SARS-CoV-2 Panel

- Minimum concentration: 1 x 10^{11} copies/mL and can be customized
- 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

Packaged SARS-CoV-2 Panel regions covered. Detailed sequences available on page 3.

Armoring Process Flow



ORDERING INFORMATION

Part Number	Product Description	Volume	Concentration	
52030	Armored RNA Quant SARS-CoV-2	0.25mL	1x10^{11} cp/mL	
52031	Armored RNA Quant RNase P	0.25mL	1x10^{11} cp/mL	
52036	Armored RNA Quant SARS-CoV-2 Panel	0.25mL	1x10^{11} cp/mL	

For more information about Armored RNA Quant® SARS-CoV-2 Panel | armored@asuragen.com

Asuragen®

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SARS-CoV-2 Panel Detailed Sequences

RdRp

TGTAGAAAACCCTCACCTTATGGGTTGGGATTATCCTAAATGTGATAGAGCCATGCCTAACATGCTTAGAATTATG
GCCCACTTGTTCTTGCTCGCAAACATACAACGTGTTGTAGCTTGTCACACCGTTTCTATAGATTAGCTAATGAGTGTG
CTCAAGTATTGAGTGAAATGGTCATGTGTGGCGGTTCACTATATGTTAAACCAGGTGGAACCTCATCAGGAGAT
GCCACAACTGCTTATGCTAATAGTGTTTTTAACATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTACT
GATGGTAACAAAATTGCCGATAAGTATGTCCGCAATTTACAACACAGACTTTATGAGTGTCTTATAGAAATAGAG
ATGTTGACACAGACTTTGTGAATGAGTTTTACGCATATTTGCGTAAACATTTCTCAATGATGATACTCTCTGACGAT
GCTGTTGTGTGTTTCAATAGCACTTATGCA

E

GTTGAACATGTTACCTTCTTCATCTACAATAAAATTGTTGATGAGCCTGAAGAACATGTCCAAATTCACACAATCGA
CGGTTCATCCGGAGTTGTTAATCCAGTAATGGAACCAATTTATGATGAACCGACGACGACTACTAGCGTGCCTTTG
TAAGCACAAGCTGATGAGTACGAACTTATGTACTCATTCGTTTCGGAAGAGACAGGTACGTTAATAGTTAATAGCG
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GATTCCAACGGTACTATTACCGTTGA

N

GAACAAACTAAAATGTCTGATAATGGACCCCAAAATCAGCGAAATGCACCCCGCATTACGTTTGGTGGACCCTCAG
ATTCAACTGGCAGTAACCAGAATGGAGAACGCAGTGGGGCGCGATCAAAACAACGTCGGCCCCAAGGTTTACCCA
ATAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAAGGCGT
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AAACATTGGCCGCAAATTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAG
TCACACCTTCGGGAACGTG

ORF

TGGTGCATCGTGTTGTCTGTACTGCCGTTGCCACATAGATCATCCAAATCCTAAAGGATTTTGTGACTTAAAAGGTA
AGTATGTACAAATACCTACAACTTGTGCTAATGACCCTGTGGGTTTTACACTTAAAAACACAGTCTGTACCGTCTGC
GGTATGTGGAAAGGTTATGGCTGTAGTTGTGATCAACTCCGCGAACCCATGCTTCAGTCAGCTGATGCACAATCGT
TTTTAAACGGGTTTGCGGTGTAAGTGCAGCCCGTCTTACACCGTGCGGCACAGGCACTAGTACTGATGTCGTATAC
AGGGCTTTTGACATCTACAATGATAAAGTAGCTGGTTTTGCTAA

RNase P

GAATTCGGCACGAGGTGGGACTTCAGCATGGCGGTGTTTGCAGATTTGGACCTGCGAGCGGGTTCTGACCTGAAG
GCTCTGCGCGGACTTGTGGAGACAGCCGCTCACCTTGGCTATTCAGTTGTTGCTATCAATCATATCGTT

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