

## Quantification Workflow Comparison Ground Turkey

### BAX® System SalQuant™

325 g ground turkey
975 mL or 1,625 mL BPW
Homogenize/stomach
Transfer 30 mL into 30 mL BAX MP + Quant Solution for shortened enrichment. <i>Other portion should be used for regulatory testing.</i>
Incubation at 42°C for 8 h
Transfer 5 µL into lysis solution
Heat at 37°C for 10 min
Heat at 95°C for 20 min
Cool in cold block for 5 min
Hydrate BAX System Real-Time PCR Assay <i>Salmonella</i> with 30 µL of lysate
Initialize and run the BAX System (75 min)
Utilize the BAX Cycle Threshold (CT) in Excel spreadsheet or BAXQuant Online Software
True quantification results available

### GENE-UP® Quant *Salmonella*

100 g ground turkey
5X PBS or other media
Homogenize/stomach
No incubation
Transfer 40 mL of sample into 50 mL tube
Centrifuge for 10 min into a 500 g pellet of debris
Transfer 25 mL of supernatant to clean tube
Centrifuge for 10 min at 4300 g to concentrate <i>Salmonella</i>
Decant supernatant
Resuspend pellet with 600 µL of Promega Nuclei Lysis Solution
Vortex for 10 seconds
Transfer 600 µL of sample into 1.5 mL tube
Incubate at 80°C for 5 min
Cool on ice for 20 min
Resuspend pellet with 600 µL of Promega Nuclei Lysis Solution
Add 200 µL of Promega Protein Precipitation Buffer
Vortex sample solution
Incubate on ice for 5 min
Centrifuge 3 min at 16,000 g
Prepare 600 µL of 95% ethanol in 1.5 mL tubes and preheat to 80°C
Transfer 600 µL of supernatant into prepared solution above (be careful to avoid precipitate)
Invert to mix solutions
Centrifuge 3 min at 16,000 g
Pipette 50 µL of solution plus 50 µL of DNA Resuspension Buffer into 1.5 mL tubes and warm in heat block
Remove PCR tubes from freezer to thaw in centrifuge rack
Decant alcohol from tubes and tap on absorbent paper
Resuspend pellet in 80 µL of prewarmed DNA suspension buffer from above step
Vortex 5 seconds
Transfer 5 µL from sample to thawed VeriPro <i>Salmonella</i> qPCR tube
Briefly centrifuge to settle
Load plate and initialize GENE-UP System
True quantification results available

#### Key

Sample Prep

Incubation

Lysate Prep

PCR

Results