

## New England Biolabs Product Specification

**Product Name:** *Monarch<sup>®</sup> HMW DNA Extraction Kit for Cells & Blood*

**Catalog #:** *T3050G*

**Kit Components:** *Monarch<sup>®</sup> DNA Capture Beads (T3005) — Store at 25°C*  
*Monarch<sup>®</sup> Bead Retainers (T3004) — Store at 25°C*  
*Monarch<sup>®</sup> 2 ml Tubes (T3003) — Store at 25°C*  
*Monarch<sup>®</sup> Collection Tubes II (T2018) — Store at 25°C*  
*Monarch<sup>®</sup> RBC Lysis Buffer (T3051) — Store at 4°C*  
*Monarch<sup>®</sup> gDNA Nuclei Prep Buffer (T3052) — Store at 25°C*  
*Monarch<sup>®</sup> gDNA Nuclei Lysis Buffer (T3053) — Store at 25°C*  
*Monarch<sup>®</sup> Precipitation Enhancer (T3055) — Store at 25°C*  
*Monarch<sup>®</sup> gDNA Wash Buffer (T3015) — Store at 25°C*  
*Monarch<sup>®</sup> gDNA Elution Buffer II (T3056) — Store at 25°C*  
*Monarch<sup>®</sup> RNase A (T3018) — Store at -20°C*  
*Proteinase K, Molecular Biology Grade (P8107) — Store at -20°C*

**Shelf Life:** *24 months*

**Storage Temp:** *Multi-temp*

**Specification Version:** *PS-T3050G v1.0*

**Effective Date:** *09 Oct 2020*

### Assay Name/Specification (minimum release criteria)

**Functional Testing (Genomic DNA Yield and Integrity Analysis) (Blood)** - Genomic DNA is purified from 8 samples of whole pig blood using the High Molecular Weight DNA Extraction from Blood (Frozen Mammalian Blood) protocol. Each set of reagents is functionally tested to ensure successful isolation of gDNA from frozen pig blood samples. Yield of genomic DNA is compared across various metrics including a minimum gDNA yield of 6 µg per extraction and a recovery equivalence of ≥85% as compared to the control lot. OD 260/280 and 260/230 are ≥1.75 in ≥80% of the samples, and DIN values are ≥9 in ≥80% of the samples.

\* **Individual Product Component Note** - Standard Quality Control Tests are performed for each component included in Monarch<sup>®</sup> HMW DNA Extraction Kit for Cells & Blood and meet the designated specifications.

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