# Extracta DBS

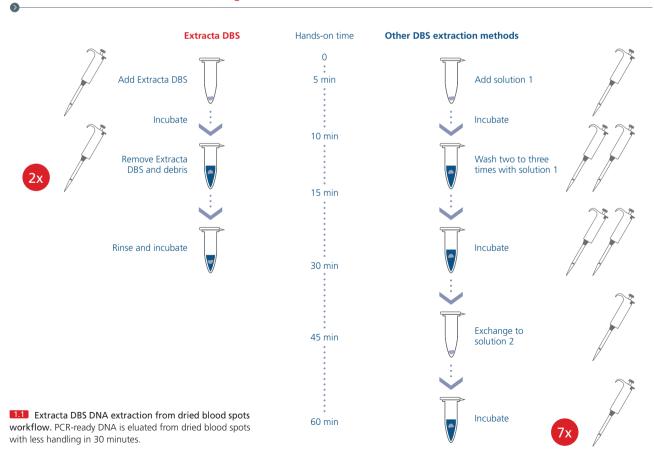
# PCR-ready genomic DNA from dried blood spots

## FEATURES & BENEFITS:

- Optimized for DNA extraction from dried blood spot punches
- Single reagent for PCR-ready DNA in less than 30 minutes
- Maximized assay sensitivity, lower Cq values, when combined with Quantabio ToughMix<sup>®</sup>
- Compatible with high-throughput automation for PCR, qPCR and NGS applications

### **DESCRIPTION:**

Extracta DBS is a ready-to-use DNA extraction reagent for rapid and efficient recovery of PCR-ready DNA from dried blood spots (DBS) on Guthrie cards or Whatman 903 filter paper. This patented single-solution process produces DNA eluates that are substantially free of PCR inhibitors and compatible with a variety of end-point PCR, real-time PCR and Next Generation Sequencing (NGS) or Sanger Sequencing (1-3) reagents. Application of Extracta DBS with PerfeCta® qPCR ToughMix or PerfeCta MultiPlex qPCR ToughMix enables accurate and reproducible quantification of DNA sequences in blood using TaqMan® based real-time qPCR.

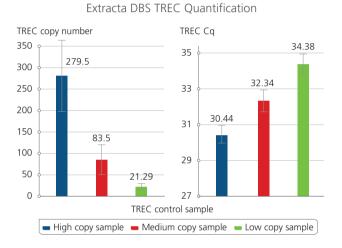


#### Fast, single solution extraction workflow in 30 min



# Combine with ToughMix and maximize qPCR assay sensitivity

Extracta DBS is the perfect match with Quantabio ToughMix for sensitive and precise target quantification. The crude extraction combined with ToughMix, a Quantabio master mix that is tolerant to common PCR inhibitors, results in higher DNA yields independent of DNA sample inputs and qualities to enable accurate detection and high sensitivity even with low copy targets.

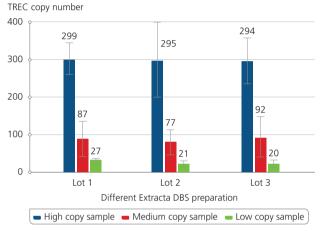


**1.2** Illustrates the results of a T-cell Receptor Excision Circles (TREC) assay using Extracta DBS and PerfeCra ToughMix. Samples were generated using dried blood spot punches following the Extracta DBS protocol and used subsequently for quantification of T-cell Receptor Excision Circles. The samples are representatives of High, Medium and Low TREC copy numbers along with the corresponding Cq values.

## Reliable, Consistent Lot-to-Lot Performance

Low amounts and quality of DNA recovered from dried blood spots commonly restrict the utilization of DNA. To overcome these limitations, Extracta DBS increases the yield and quality allowing for efficient and reliable recovery of DNA from dried blood spots. Manufactured under stringent ISO 13485 standards, Extracta DBS ensures uniform lot-to-lot performance resulting in reliable reproducibility in combination with Quantabio ToughMix.

Extracta DBS TREC quantification: uniform lot performance



**1.3** This figure demonstrates consistent lot-to-lot performance in a TREC quantification assay using genomic DNA extracted from dried blood spots. Lot-to-lot performance was tested for High, Medium and Low copy number TREC samples. The results highlight the reliability and reproducibility across various product lots which are attributed to Quantabio's high manufacturing and production standards under ISO 13485.

#### References

- 1. Baker et al. 2016. Improving newborn screening for cystic fibrosis using next-generation sequencing technology: a technical feasibility study. Genet Med. 18(3):231-238.
- 2. Baker et al. 2010. Implementing Routine Testing for Severe Combined Immunodeficiency within Wisconsin's Newborn Screening Program. Public Health Rep. 125 Suppl 2, 88-95.
- 3. Verbsky et al. 2012. Newborn Screening for Severe Combined Immunodeficiency; The Wisconsin Experience (2008-2011). J. Clin. Immunol. 32, 82-88.

# ORDER INFO

Product Name	Quantabio Catalog Number	Size
Extracta DBS, 10 ml	95171-010	10 ml
Extracta DBS, 500 ml	95171-500	500 ml
Related Products		
PerfeC⊤a qPCR ToughMix - 250 R	95112-250	250 x 20 µl rxns (2 x 1.25 ml)
PerfeC⊤a qPCR Multiplex ToughMix - 250 R	95112-250	250 x 20 µl rxns (2 x 1.25 ml)

Quantabio ToughMixes are also available with different concentrations of ROX and in bigger reaction sizes.

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