# revvity

# Create your own Mimix<sup>™</sup> reference standard.



### Design the control for your diagnostic workflow

#### Choose from over 350 clinically-relevant variants

- Single nucleotide variants (SNVs)
- Structural variants (SVs)
- Copy number variants (CNVs)
- Insertions and deletions (INDELs)
- Fusions

- Create your custom reference standard using our user-friendly online designer tool available on our website.
- In cases where the desired gene edits are unavailable, create your own assay specific edits using our in-house cell line engineering (CLE) pipeline
- More than 2,000 custom controls designed and in-use today
- Formats to mimic patient samples

Format	gDNA	FFPE DNA	Cell-free DNA in buffer	Cell-free DNA in Synthetic Matrix II	
Number of variants	1 to 10	1 to 10	1 to 10	1 to 10	
Standard unit size(s)*	1 µg	1x15 µm section	350 ng	40 ng	Talk to u about yo RNA, ctD1
	Бия	0.5 cm Block			
	υμg	1.0 cm Block			
Concentration / yield	50 ng/µL	400 ng*	20 ng/µL, 40 ng/µL	400 ng/mL	
Volume per unit	20 µL	N/A	17.5 µL	1 mL	
	100 µL				
Standard fragment sizes	N/A	N/A	160bp, 170bp	160bp, 170bp	and fcD
Quality control	Nanodrop	Quantifluor	Qubit	Qubit	needs
	ddPCR	ddPCR	ddPCR	ddPCR	
	Agarose gel Electrophoresis	Agarose gel Electrophoresis	Tapestation	Tapestation	
Minimum order quantities	20 µg	300 sections /0.5 cm block	15 µg	15 µg	
Optional QC <sup>i</sup>	Qubit Tapestation	Qubit Tapestation	Nanodrop	Nanodrop	
	NGS	NGS	NGS	NGS	
ISO Status	13485:2016	13485:2016	13485:2016	9001:2015	

#### Options for made-to-order reference standards

\*DNA per section using Promega Maxwell® or chemagic<sup>™</sup> FFPE DNA Extraction kits, \*Minimum purchase quantities apply, <sup>i</sup>Optional QC is performed in addition to standard QC when requested.

#### Rigorous quality control spans our manufacturing process

Multiple quality control checks and reviews are carried out by our scientists at major process steps across the workflow.

Shown below is a workflow for generation of FFPE, gDNA, cfDNA and cfDNA in plasma products

Typical production time is 10-12 weeks for manufacture of gDNA, cfDNA or FFPE from Revvity's Mimix variant collection. Novel cell line generation and validation takes as little as 16 weeks.



#### Bring consistency to your workflow

## Reproducible cell line-derived reference material to mimic patient samples

Unlike the widely used but limited patient samples, which can be inconsistent when switching between different patients, cell line-derived reference standards offer consistent performance across all batches.

#### Consistent copy number variants (CNVs)

5 batches of Structural Multiplex cfDNA Reference Standard (HD786) were manufactured between 2019 and 2023. The figure on the right shows the consistency of copy number of two example genes in culture over this time period.

Amplification of MET and MYC were tested using ddPCR. Acceptance criteria used during QC for this product are shown in blue for MET and red for MYC.



#### Reproducible allele frequencies

6 batches of Multiplex I cfDNA Reference Standard Set (HD780) were manufactured between 2019 and 2024. 4 variants were selected from each batch and tested for 3 allele frequencies (as included in the product set) by ddPCR. Figures A-C show reproducibility across the batches

for each variant at different allele frequencies, as low as 0.1%. Acceptance criteria used during QC for this product are shown in red for each allele frequency.



For more information and to find our latest contact information: Email: UK-CAM-CustomDx@horizondiscovery.com Website: www.revvity.com/mimix



Scan to use our create your own reference standard interactive tool



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