

Simply and Reliably Size DMPK Repeat Expansions within a Single Day

The AmplideX[®] PCR/CE *DMPK* Kit^{*} introduces a groundbreaking alternative for the detection and sizing of CTG repeats within the *DMPK* gene. Challenged by very large trinucleotide expansions, *DMPK* analysis has required the use of Southern blot technology, thereby limiting many laboratories' ability to resolve these repeat sequences. By introducing a simple, streamlined, PCR-only workflow, the AmplideX PCR/CE *DMPK* Kit^{*} can replace Southern blot and put *DMPK* analysis within the reach of laboratories everywhere.

REDUCED COMPLEXITY

- Proprietary PCR solutions for GC-rich amplification and detection
- Eliminates need for Southern blot
- Resolves zygosity and detects mosaicism

OPTIMIZED WORKFLOW

- Direct injection of PCR products into CE instruments
- Fully kitted, end-to-end solutions that significantly reduce hands-on-time
- Sample-to-result possible within a single shift

QUALITY PERFORMANCE

- Accurate sizing of alleles <200 CTG repeats and detection of all alleles >200 repeats using CE
- Optional AGE protocol allows sizing of alleles between 200-2000 repeats
- Analysis tool converts raw base pair data into repeat number







Figure 1. AmplideX PCR/CE *DMPK* Workflow, including optional AGE workflow for larger expansions.



AmplideX® PCR/CE DMPK Kit*

Sample Name	External Lab PCR + Southern	Asuragen PCR/CE	Asuragen PCR/AGE (allele 2)	2-log ladder (BPs)	S1	52	S3	S4	S5	S6	S7	S8	59	S10
S1	10,300-500	11 , >200	Smear , High Mosaic 300-500											
S2	4,1200-1350	5 , >200	~1100	10kb 8kb 6kb 5kb										
\$3	4,1100-1500	5,>200	Smear , High Mosaic >500	4kb										
S 4	11,200-300	12 , >200	~260-350	25b										
\$5	4,800-900	5 , >200	~650-700	1.58b										
S6	25,1050	26 , >200	~1000	1.295								U.	2	
S7	12,100-150	13 , 71 , 129	70,130	0.8kb 0.7kb 0.6kb									Ξ.	ľ
S8	11,1900-2220	12 , >200	700,1900	0.5kb 0.4kb										
\$9	21,300	22 , >200	Mosaic , 261	0.3kb 0.2kb									2	2
S10	4,50-250	5,>200	150 , Smear >200	0.1kb										

Figure 2. Comparison of residual clinical sample results between Asuragen (AmplideX Kit) and partner lab (PCR + Southern blot).

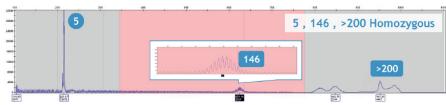


Figure 3. Sensitive and accurate sizing of DMPK expansions up to 200 repeats.

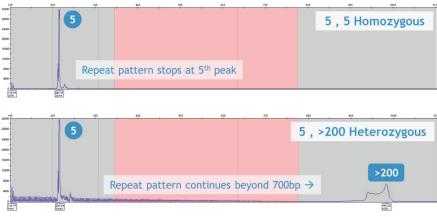


Figure 4. Clear resolution of zygosity.

*For Research Use Only. Not for use in Diagnostic procedures.

--594 --427 --327 --227 --194 --161 --127 --94 --61 --27

KIT ORDERING INFORMATION									
AmplideX PCR/CE DMPK Kit*	[P/N: 49655] 32 REACTIONS								

