

## Simply and Reliably Size DMPK Repeat Expansions within a Single Day

Myotonic Dystrophy Type I (DM1, Steinert's Disease) is an inherited form of muscular dystrophy and is characterized by the presence of 50 or more CTG repeats within the *DMPK* gene. The AmplideX® DM1 Dx Kit introduces a groundbreaking alternative for the detection and sizing of CTG repeats within the *DMPK* gene, reducing testing turnaround to just one day. By introducing a simple, streamlined, PCR-only workflow, the AmplideX DM1 Dx Kit offers an alternative to Southern blot and puts *DMPK* analysis within the reach of laboratories everywhere.

## REDUCED COMPLEXITY

- Proprietary PCR solutions for GC-rich amplification and detection
- May eliminate 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 up to 1000 repeats
- Analysis tool converts raw base pair data into repeat number



Figure 1. AmplideX PCR/CE DM1 Dx Workflow, including optional AGE workflow for larger expansions.





Sample Name	External Lab PCR + Southern	Asuragen PCR/CE	Asuragen PCR/AGE (allele 2)
S1	10,300-500	11 , >200	Smear , High Mosaic 300-500
S2	4 , 1200-1350	5 , >200	~1100
\$3	4 , 1100-1500	5 , >200	Smear , High Mosaic >500
\$4	11 , 200-300	12 , >200	~260-350
S5	4 , 800-900	5 , >200	~650-700
S6	25 , 1050	26 , >200	~1000
S7	12 , 100-150	13 , 71 , 129	70 , 130
\$8	11 , 1900-2220	12 , >200	700 , 1900

22 , >200

5 , >200

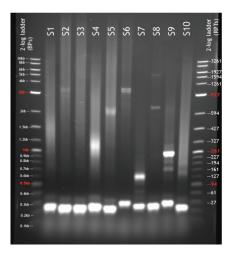


Figure 2. Comparison of residual clinical sample results between Asuragen (AmplideX Kit) and partner lab (PCR + Southern blot).

Mosaic, 261

150 , Smear >200
\*AmplideX detects mosaicism down to 5%

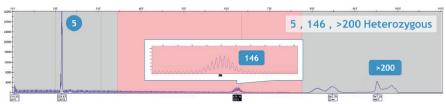


Figure 3. Sensitive and accurate sizing of DMPK expansions up to 200 repeats.

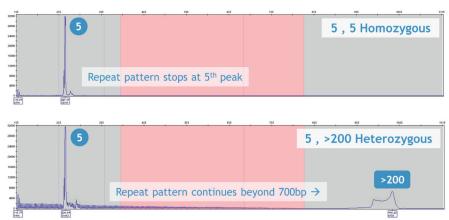


Figure 4. Clear resolution of zygosity.

KIT ORDERING INFORMATION			
AmplideX DM1 Dx Kit*	[P/N: 76048] 32 REACTIONS		

\*CE-IVD for US export only.

**S9** 

**S10** 

21,300

4,50-250



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