

# AmplideX<sup>®</sup>

## PCR/CE *C9orf72* Kit

### ACCURATE *C9orf72* ANALYSIS MADE EASIER

A better understanding of hexanucleotide repeat expansions in the *C9orf72* gene requires a robust PCR amplification assay. The AmplideX<sup>®</sup> PCR/CE *C9orf72* Kit is a research tool for the reliable amplification of pathogenic hexanucleotide repeats (GGGGCC) in the *C9orf72* gene that are associated with amyotrophic lateral sclerosis (ALS) and frontotemporal dementia (FTD). Using our proprietary GC-rich PCR chemistry and building on the success of our AmplideX *FMR1* product, this kit provides a simple, single-tube PCR workflow to profile *C9orf72* repeat sequences.



Figure 1: AmplideX PCR/CE *C9orf72* Kit components

#### SIMPLE WORKFLOW

- Single PCR reaction for both sizing and screening
- A single sourced kit consisting of all PCR reagents needed for *C9orf72* repeat amplification
- Streamlined workflow with minimal hands-on time
- Decreased need for Southern blot analysis

#### IMPROVED PERFORMANCE

- Five-fold improvement in length of alleles sized: accurate sizing up to 145 repeats
- Detection of alleles greater than 145 repeats
- Reveal low-level mosaicism and minor alleles
- Identifies sequence variability near the repeat region

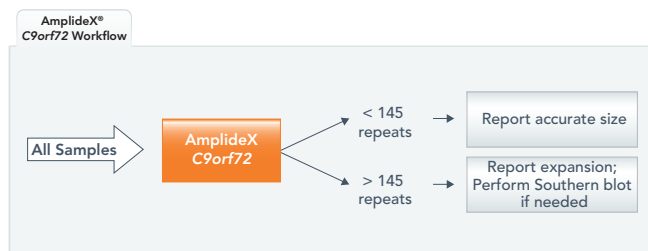


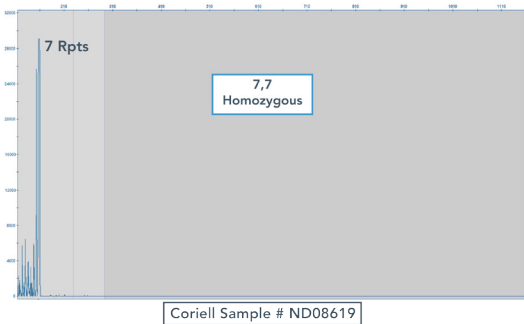
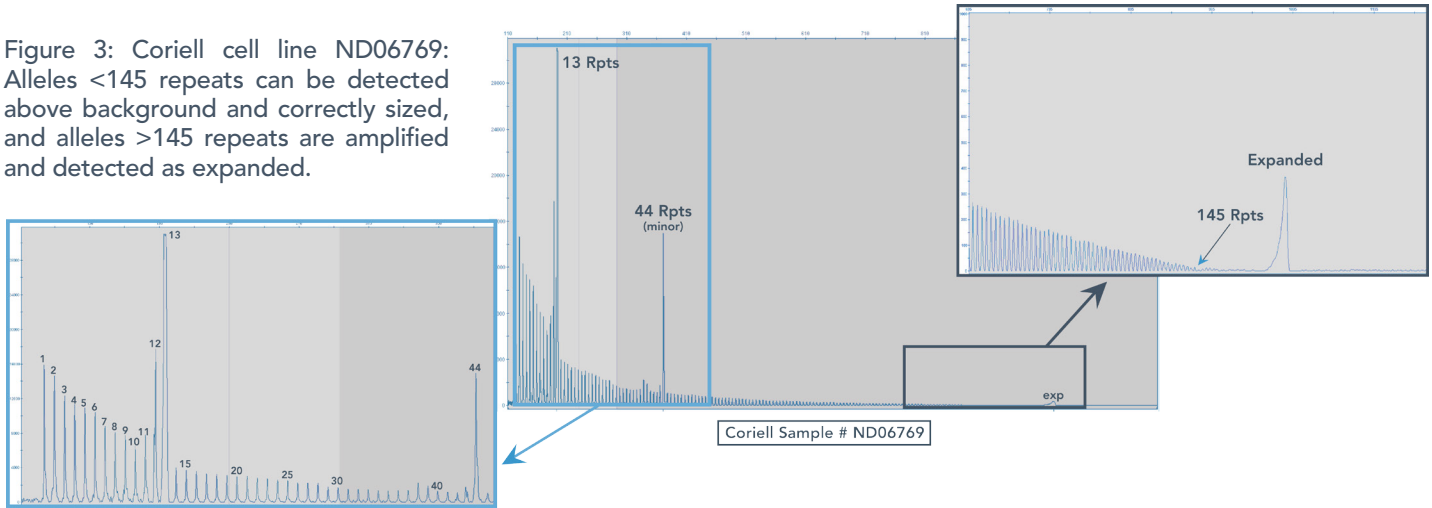
Figure 2: AmplideX PCR/CE *C9orf72* Kit workflow

# AmplideX<sup>®</sup>

## PCR/CE C9orf72 Kit

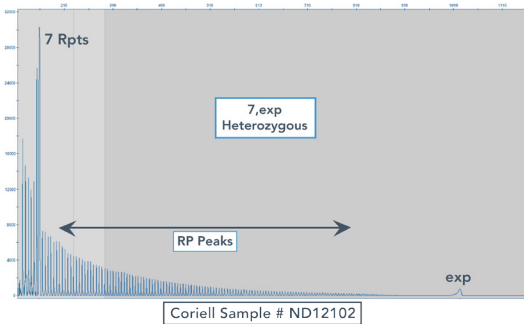
### ACCURATELY SIZE UP TO 145 REPEATS AND DETECT ALLELES GREATER THAN 145 REPEATS

Figure 3: Coriell cell line ND06769: Alleles <145 repeats can be detected above background and correctly sized, and alleles >145 repeats are amplified and detected as expanded.



### CLEAR ZYGOSITY RESOLUTION THROUGH DISTINCT REPEAT-PRIMED PATTERN

Figure 4: Side by side comparison of 2 Coriell cell lines: ND08619 (7,7 homozygous) and ND12102 (7,expanded heterozygous): Extension of the repeat-primed peak pattern beyond the shorter allele clearly differentiates the heterozygous sample from homozygous sample.



KIT ORDERING INFORMATION	
AmplideX <sup>®</sup> PCR/CE C9orf72 Kit*	[P/N 49581] 50 REACTIONS

\*For research use only. Not for use in diagnostic procedures.