

# Whole Genome Sequencing with Short Tandem Repeats (STR) for a More Comprehensive Diagnosis

Disease	Gene	STR
Central hypoventilation syndrome, congenital, with or without Hirschsprung disease [MIM:209880]	<i>PHOX2B</i>	GCN
Cerebellar ataxia, neuropathy, and vestibular areflexia syndrome [MIM:614575]	<i>RFC1</i>	AARRG
Corneal dystrophy, Fuchs endothelial, 3 [MIM:613267]	<i>TCF4</i>	CTG or CAG
Dentatorubral-pallidoluysian atrophy [MIM:125370]	<i>ATN1</i>	CAG
Epilepsy, progressive myoclonic 1A (Unverricht and Lundborg) [MIM:254800]	<i>CSTB</i>	CCCCGCCCGCG
Fragile X syndrome [MIM:300624]; Fragile X tremor/ataxia syndrome [MIM:300623]; Premature ovarian failure 1 [MIM:311360] *	<i>FMR1</i>	CGG
Friedreich ataxia [MIM:229300] *	<i>FXN</i>	GAA
Frontotemporal dementia and/or amyotrophic lateral sclerosis 1 [MIM:105550]	<i>C9orf72</i>	GGGGCC
Global developmental delay, progressive ataxia, and elevated glutamine [MIM:618412]	<i>GLS</i>	GCA
Huntington disease [MIM:143100] *	<i>HTT</i>	CAG
Huntington disease-like 2 [MIM:606438]	<i>JPH3</i>	CTG
Intellectual developmental disorder, X-linked 109 [MIM:309548]	<i>AFF2</i>	CCG
Intellectual Disability, FRA12A type [MIM:136630]	<i>DIP2B</i>	CGG
Machado-Joseph disease [MIM:109150]	<i>ATXN3</i>	CAG
Myotonic dystrophy 1 [MIM:160900] *	<i>DMPK</i>	CTG
Myotonic dystrophy 2 [MIM:602668]	<i>CNBP</i>	CCTG
Neuronal intranuclear inclusion disease [MIM:603472]; Tremor, hereditary essential, 6 [MIM:618866]	<i>NOTCH2NLC</i>	GGC
Oculopharyngeal muscular dystrophy [MIM:164300]	<i>PABPN1</i>	GCN
Spinal and bulbar muscular atrophy of Kennedy [MIM:313200] *	<i>AR</i>	CAG
Spinocerebellar ataxia 1 [MIM:164400]	<i>ATXN1</i>	CAG
Spinocerebellar ataxia 2 [MIM:183090]	<i>ATXN2</i>	CAG
Spinocerebellar ataxia 6 [MIM:183086]	<i>CACNA1A</i>	CAG
Spinocerebellar ataxia 7 [MIM:164500]	<i>ATXN7</i>	CAG
Spinocerebellar ataxia 8 [MIM:608768]	<i>ATXN8OS</i>	CTA/G
Spinocerebellar ataxia 10 [MIM:603516]	<i>ATXN10</i>	ATTCT
Spinocerebellar ataxia 12 [MIM:604326]	<i>PPP2R2B</i>	CAG
Spinocerebellar ataxia 17 [MIM:607136]	<i>TBP</i>	CAG or CAA
Spinocerebellar ataxia 27B [MIM:620174]	<i>FGF14</i>	GAA
Spinocerebellar ataxia 36 [MIM:614153]	<i>NOP56</i>	GGCCTG

\* Can be ordered as a standalone test.

## Improving Lives Through Personalized Care And Genetic Expertise

We provide diagnostic answers that matter - empowering patients and families to make informed decisions about their health and helping healthcare providers best manage care for their patients.

## Whole Genome Sequencing — the Most Comprehensive Genetic Testing Solution

WGS assesses 98% of the genome, detecting known and potential disease-causing variants in both the protein-coding exons and clinically significant non-coding regions of the genome.

### Analysis

- Genome-wide detection of single nucleotide variants (SNVs), insertions and deletions (indels), copy number variants (CNVs), structural variants (SVs), and absence of heterozygosity (AOH)
- Detection of mitochondrial DNA (mtDNA) variants
- Short tandem repeat (STR) detection in 29 genes
- Uniparental disomy (UPD) reported when both parents tested

### WGS Offers

- **RNAseq<sup>†</sup> for enhanced variant classification**
- Variant interpretation aided by concurrent, familial comparator analysis
- Rapid testing options with written results starting at 5 days
- Flexible sample types accepted

## Baylor Genetics: Making Genetic Testing More Accessible

- Online portal and Epic Aura for streamlined test ordering, supported by genetic counselors
- Billing support including prior authorization, verification of benefits, patient out-of-pocket cost estimation, and patient financial assistance program

To view our comprehensive test menu, visit [baylorgenetics.com](https://www.baylorgenetics.com).

<sup>†</sup> A qualified variant meets our prediction algorithm criteria (Splice AI) that RNAseq will provide additional functional information.