

Table S2. Human POLH gene: sequence and information content of normal and mutant splice sites							
3' Intron (ACCEPTOR)	bits		exon		bits	5' Intron (DONOR)	
5'UTR			1				1
					TTACCTTG	7.4	gtaagaaaattt
1			2				2
cataaaatggtgttacag	3.4	AAAAATG			GGTGGTGG	5.7	gtatgtagcatt
2			3				3
gtgagttctaattcattcag	5.5	AGGGGAT			ACAATAAG	7.8	gtgaaggcta
3			4				4
aatgagccttatactcttag	5.7	GTACCGG			TCAGAAAG	5.4	gtacttccatag
			4				
		XP1SE splicing variant-1 (deletion 90 bp exon 4)			TCAGAAAT	2.1	gtacttccatag
			GCTACAAG	6.1	gtcagcctatct		4
		XP1SE splicing variant-2 (insertion 163 bp intron 4)			TCAGAAAT	2.1	6.5
							gtatatggctgt
4			5				5
ccttttttctaaccttag	11.3	AATAATT			CTCACCAA	8.1	gtaagaaaaaaa
5			6				6
tatacttgcagctccag	9.3	GTCCTGG			CGCAAAAT	9.3	gtaagtattcag
			6				6
		XP31BE splicing variant-1 (104 bp deletion - entire exon 6)			CGCAAAAT	-0.5	ctaagtattcag
		XP31BE splicing variant-2 (42 bp deletion inside exon 6)					
			TCACATGG	3.8	gtcagtcccaca		
6			7				7
tttgtctccttggatcag	9.6	CCGTAGT			AAGAATGG	9.2	gtaagtattca
7			8				8
tttttgctgggtattag	5.7	GTCTTGG			GGGAACAG	10.8	gtaagctggcat
8			9				9
aaagtctcaatacttttag	4.7	GTACAAT			GAAATGAT	6.1	gtaagatttct
9			10				10
tccatccttccaccacag	11.4	AATGACA			ACAGAATG	9.5	gtgagttctttt
10			11				3'UTR
ttctttactttctgtatag	12.1	GTCTCCT					