

## Isoforms of base excision repair enzymes produced by alternative splicing

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Supplementary table. Alternative splice isoforms of *POLB* gene

Alternative splice isoforms	Premature termination codon	Frameshift	Protein	kDa	References
$\Sigma$ ex $\alpha$ (in6)	-	-	370	42	8–10,17, 18
$\Sigma$ ex $\beta$ (in9)	+	+	193		10,17,18
$\Sigma$ ex $\alpha$ ,ex $\beta$	+	+	228		10,17,18
$\Sigma$ ex $\beta$ , part in3	ND	ND	96		18
$\Sigma$ in11	+	+	350		13,15,19
$\Sigma$ ex $\alpha$ , $\Delta$ ex2	+	+	26		8,16
$\Sigma$ ex $\beta$ , $\Delta$ ex2	+	+	26		10,18
$\Sigma$ 19bp, $\Delta$ ex2	+	+	26		8
$\Sigma$ ex $\beta$ , $\Delta$ 2,4-6	+	+	26		10
$\Sigma$ ex $\alpha$ , $\Delta$ ex11,13	-	-	294		3,5
$\Delta$ part ex1-8	+	+	182		3
$\Delta$ ex2	+	+	26		5,7–10,13,15–19,21
$\Delta$ ex2,3	+	+	28		10, 17
$\Delta$ ex2,3,11	+	+	28		10,17,18
$\Delta$ ex2,4	+	+	26		19
$\Delta$ ex2,4,5	+	+	26		8,10,18
$\Delta$ ex2,4-6	+	+	26		8,10,19
$\Delta$ ex2,4,5,9	+	+	26		19
$\Delta$ ex2,part ex 4, ex11	+	+	26		19
$\Delta$ ex2,4-13	+	+	26		19
$\Delta$ ex2,4,5,11	+	+	26		10
$\Delta$ ex2,4-6,11	+	+	26		10,16
$\Delta$ ex2,4-6,12,13	+	+	26		10
$\Delta$ ex2,4-11	+	+	26		16
$\Delta$ ex2,5	+	+	26		18
$\Delta$ ex2,5,6,9	+	+	26		19
$\Delta$ ex2-5,13	-	-	164		18
$\Delta$ ex2-6	ND	ND	42		18,19

$\Delta$ ex2,7,8,9	+	+	26		19
$\Delta$ ex2,9	+	+	26		16,19
$\Delta$ ex2-9	ND	ND	44		18
$\Delta$ ex2,11	+	+	26		10,16,17,18
$\Delta$ ex2,11-13	+	+	26		10,17, 18
$\Delta$ ex2,12,13	+	+	26		10,18
$\Delta$ ex2,13	+	+	26		18
$\Delta$ ex2-13	-	-	51		10,17, 19
$\Delta$ ex3-5	ND	ND	268		18
$\Delta$ ex3-6,10,11	ND	ND	44		10
$\Delta$ ex3-6,11-13	ND	ND	44		10
$\Delta$ ex3-6,9,11	ND	ND	46		16
$\Delta$ ex3-9,12,13	ND	ND	45		10
$\Delta$ ex4	-	+	310		10,17,18,19
$\Delta$ ex4,5	+	+	96		8,10,17,19
$\Delta$ ex4-6	+	+	70		8, 19
$\Delta$ ex4,5,12,13	+	+	71		18
$\Delta$ ex4-6,11-13	+	+	71		11
$\Delta$ ex4-9,11-13	ND	ND	118		5
$\Delta$ ex4-10	-	-	190		10,17,18
$\Delta$ ex4-11	-	-	161		10,17,18
$\Delta$ ex4-11,13	-	-	93		10, 17
$\Delta$ ex4-13	-	-	93		10,17, 18
$\Delta$ ex7,8	ND	ND	128		19
$\Delta$ part ex10-part ex13	ND	ND	ND		20
$\Delta$ ex11	-	-	306	36	1-6,9,10,13-23
$\Delta$ part ex 11	ND	ND	ND		20
$\Delta$ ex11-13	-	+	261	26,5	10,12,17,18,21
$\Delta$ ex12,13	-	-	290		10,17,18
$\Delta$ part ex12-part ex 13	ND	ND	ND		20
$\Delta$ ex13	-	-	267		18
$\Delta$ ex14	-	-	298		5

ND – no data

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