

# BARLEY EST DNA REPLICATION AND REPAIR DATABASE

Database of Barley EST Sequences Similar to  
Genes Involved in DNA Replication and Repair



HvMLH1	-----MEVDDA-VPHGGGGGGESPHIRRLEESVVNRIAGEMIQRTSSAVQDLVENS	51
OsMLH1	-----MDEP-SPRGGGCAGEPPRIRRLEESVVNRIAGAEVIQRPSSAVKELIENS	49
AtMLH1	MIDSSSLTAEMEEESPATTIVPREPKIQRLEESVVNRIAGAEVIQRPVSAVKELVENS	60
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HvMLH1	IDADSSSTISVTVKDGGPKLIQVSDDGHGIRCEDLPILCERHTTSKLSAYEDLQTIKSMGF	111
OsMLH1	LDAGASSVSAVKDGGKLIQVSDDGHGIRFEDLAILCERHTTSKLSAYEDLQTIKSMGF	109
AtMLH1	LDADSSSISVVVKDGGKLIQVSDDGHGIRREDLPILCERHTTSKLTKFEDLFLSSMGF	120
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HvMLH1	RGEALASMTYVGHVTVTTITEGQLHGYSYRDGVMENDPKPCA AVKGTQIMVENLFYNM	171
OsMLH1	RGEALASMTYVGHVTVTTITEGQLHGYSYRDGVMENEPKPCA AVKGTQVMVENLFYNM	169
AtMLH1	RGEALASMTYVAHVTVTTITKGQIHGYSYRDGVMHEPKACA AVKGTQIMVENLFYNM	180
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HvMLH1	VARRKTLQNSNDYPKIVDFISRFVAVHHINVNFSCRKHGANRADVHSGSTS	231
OsMLH1	VARRKTLQNSNDYPKIVDFISRFVAVHHINVTFSCRKHGANRADVHSASTS	229
AtMLH1	IARRKTLQNSADYGVKIVDLLSRMAIHNNVFSSCRKHGAVKADVHSVVSF	240
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HvMLH1	YGASVVRDLMEIQVSDENAVDEIFKMDGFI SNANYVAKKTTMILFINDRLVDCTSLKRAT	291
OsMLH1	YGASVVRDLIEIKVSYEDAADSIFKMDGYI SNANYVAKKITMILFINDRLVDCTALKRAI	289
AtMLH1	YGVSAKNLMEI QVSDENAVDEIFKMDGFI SNANSYVAKKITLVLFINDRLVECSALKRAI	300
	**.*.**:*:***:***:*.***.*****:;*****:***:***	
HvMLH1	EFVYSAILPQASKPFIYMSINLPPEHVDVNIHPTKKEVSLLNQERIEIKIDAIEEKLNV	351
OsMLH1	EFVYSATLPQASKPFIYMSIHLPEHVDVNIHPTKKEVSLLNQERIEIETIRNAIEEKLNV	349
AtMLH1	EIVYAATLPKASKPFVYMSINLPREHVDINIHPTKKEVSLLNQEIIIEIQSEVEVKLRN	360
	:::*.**:*.***.*****:***.*****:*****.***.*****:***.***	
HvMLH1	CNNTRIFQTQALNPSALTQANTRKDMGTEVSTPTGEEKSQKIPVVSQIVRTDPRDPGRSLHT	411
OsMLH1	SNTRIFQTQALNLSGIAQANPQDKVSEASMSGTSQKIPVSQMVRTDPRNPSGRSLHT	409
AtMLH1	ANDTRTFQEQKVEYIQSTLTSQKSD-SPVSQKPSGQKTQKVPVNMVTRDSSDPAGRLHA	419
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HvMLH1	YWQGQTSNLEKKS-DLVAVRNIVSRRNPKDAGDLSRHELVEIDSNLHPGLFDIVKNC	470
OsMLH1	YWHGQSSNLEKFD-LVSVRNIVSRRNPKDAGDLSRHELVEIDSSFPHPGLLDIVKNC	468
AtMLH1	FLQPKQSLPDKVSSLSVVRSSVRQRNPKETADLSSVQELIAGVDSCHHPGMLTVRNC	479
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HvMLH1	TYVGVADDEVFALIQHNLLYLNVVNVSKELMYQQALCRFGNFNAIKLSEPAPLLELLRM	530
OsMLH1	TYVGLADEAFALIQHNRLYLNVVNVSKELMYQQALCRFGNFNAIQLSEPAPLQELLM	528
AtMLH1	TYVGMADDVFALVQYNTHLYLANVVNLKELMYQQTLRRFAHFNAIQLSDPAPLSELILL	539
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HvMLH1	ALKDDES--MSDVNEKEKLEIAEVNTEILKENAEMINEYFSIHIDQGGNLRPLPVLDQY	588
OsMLH1	ALKDDEL--MSDEKDEKLEIAEVNTEILKENAEMINEYFSIHIDQDGKLRPLPVLDQY	586
AtMLH1	ALKEEDLDPGNDTKDDLKERIAEMNTELLKEKAEMLEEYFSVHIDSSANLSRPLVILDQY	599
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HvMLH1	TPDMDRLPFEMLSLGNITWDVEKECFRTAAAAIGNFYALHPPILPNPSGKGIQLYKKNK	648
OsMLH1	TPDMDRLPFVFLALGNVTDWDEKECFRTVASAVGNFYALHPPILPNPSGNGIHLYKKNR	646
AtMLH1	TPDMDRVPEFLCLGNVVEWEDEKSCFQGVSAAGNFYAMHPPILPNPSGDGIQFYSKRG	659
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HvMLH1      DCMGSAEQADNNLPSTDEDDIDQELLAEAEAAWAQREWTIQHVLFPMSRFLFKPPKSMAT 708
OsMLH1      DSM-ADEHAENDLIS-DENDVDQELLAEAEAAWAQREWTIQHVLFPMSRFLFKPPKSMAT 704
AtMLH1      ESS--QEKSDLEGNVDMEDNLDQDLLSDAENAWAQREWSIQHVLFPMSRFLFKPPASMAS 717
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HvMLH1      DGTfVQIASLDKLYKIFERC 728
OsMLH1      DGTfVQVASLEKLYKIFERC 724
AtMLH1      NGTfVKVASLEKLYKIFERC 737
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Conserved domains:

