

MEC1	-----NSWT--DD-----QEQAFQKKLQDNILG-----IF	884	
ATR	-----GLSILASFASDD--PYQGP---RDIISPPELMADYLQPKLLG-----IL	1131	
ATM	-----SSASQSTDLCDGDFSGDLDPAP--NPHFPFHVIKATFAYISNCHK----TKLSIL	1405	
TEL1	WIIRFTDLGSLTELRSTVEKLFPTSYLSPYLFENSSVSMRYQYPLHIPLALGATLVQTQF	1274	
MEC1	Q-----VFSSDIHDVEGRTTYEYKLRVING-ISFLIYAP-----	918	
ATR	A-----FFNMQLLSSSV--GIEDKMALNSLMSLMKMGF-----	1164	
ATM	EILSKSPDSYQKILLAIQEAETNNVYKHR----ILKIYHLFVSLLLKDIKSGLGGAW	1461	
TEL1	AHEKNNTHEFKLLFLSVITDLEKTSTYIGKLRCARELKYLFLYENVLVKSS-----TL	1328	
MEC1	-----KKSIIISALAQISICL-----QTGLGLKEV-RYEAFCRWHLVVRHLNDE	960	A929T
ATR	-----KH-VSSVRVKMMTTL-----RTGLRFKDDFPELCCRAWDCFVRCLDHA	1206	
ATM	AFVLRDVIYTLI-HYINQRPSCI---MDV-SLRSFSLCCDLLSQCQTAVTYCKDALEN	1515	
TEL1	NFIIIRLSKFLIDTQIHDEVITIFSSLLNLADKNTEIEPSLPNLFCKIFI-YLRENK--	1385	
MEC1	ELSTVIDSLIAFILQKWSEFNGKLRNIVYSILDTL---IKEKSDLILKPKYTTLA----	1013	
ATR	CLGSLLSHVIVALPLIH-IQPKETA---AIFHYL---IENRDAVQDFLH-EIYF----	1254	
ATM	HLHVIVGTIPLVYE-----QVEVQKQVLDLLKYL---VIDNKN---ENLYITIKLLDP	1564	
TEL1	QLSPSFQQAIKLLEH-----RDLIK---IKTWKYFLDAIFGNIVQ---DDIYENTELLDA	1434	
MEC1	LVGKPELGLIARDGQFARMVKNIRSTTD-LIPIFANNLKSS---NKYVINQNLDDIEVYL	1069	
ATR	LPDHPPELKKIKAV--LQYRKETSESTD-LQTTQLQSMKAIQHENVVDRIHALTSKQETL	1311	
ATM	FPDHVVFKDLRITQKIKYSRGPFSLLEEINHFVLSVSYDA---LPLTRLEGLKDLRRQL	1621	
TEL1	SDC--GVDDVVLVLLFSYARRPVAS-----KIGC-----	1462	
MEC1	R-RKQTERSIDFTPCKVQTSIDITLVLGALLDTSK--FRNLDKDLCEKCAKCSIMIGVL	1126	G1124N
ATR	Y--KNQEKLIKATDSETVEPIISQLVTVLLKGCQD-----ANSQARLLCGECLGELGAI	1364	
ATM	ELHKDQMVDIRASQDNPDGIMVKLVNLLQLSKMAINHTGEKEVLEAVGSCLEGEVGP	1681	
TEL1	SLSKAAANILKH--HVPKEYLSKNFKLWFAALSRRILQEQVQRER---STNFNNEVHLK	1517	
MEC1	DVTKHEFKRTTYS-----ENEVDLNSVQTIKFLIWINVINDILVPAFWQSENPSKQLFVA	1181	
ATR	DPGRLDFTTETQ-----GKD-FTFVTGVEDSSPAYGLLMELTRAYLAYADNSRAQDSAA	1418	
ATM	DFSTIAIQHS-----KDASYTKALKLPEDKELQWT-FI-MLT---YLNNT-----	1721	
TEL1	NFEMV-FRHPQPHMIYQRISTFNKEAELYDSTEVFFISEC-IIT---YLVGY-----	1565	
MEC1	LVIQESLKYCGLSSESWDMNHKELYPNEAKLWEKFNVS---SKTTIYPLLSLYLA----	1234	
ATR	YAIQELLS-----IYDCREMETNGPGHQLWRRFPEH---VREILEPHLNTRYKSSQ--	1466	
ATM	-LVEDCVKV--RRAAVTCLKNILATKTGHSFWEIYKMTTDPMLAYLQPPRTRSRKFFLEV	1778	
TEL1	-SIG-----NSESEFCFRDNIMNENKDKVAPLD---K-DVLNAIYPL-----	1602	
MEC1	-----QSWKEYVP-LKYPNNFKEGYKIWVKRFTLDLLKTGT-TENHPLHVFSLLIREDD	1287	
ATR	---KSTDWVSGVKK-PIYL-SKLGSNFAEWSASWAGYLITKVRHDLASKIFTCSSIMMKHD	1521	
ATM	RFDKENPFEGLD--DINLWIPLSENHDIWIKTLTCAFLDSGGT--KCEIQLLKPCEVK	1834	
TEL1	----ANF-GMESFICDTYLSVNEPYNLWLSKFAARSLIHQISF--NIPPIVCLYPLCKGS	1655	
MEC1	GSLSNFLLPYISLDIIKAKE---GTPYADILNGIIEFDSIFTCNLEG-----MN	1335	
ATR	FKVTIYLLPHILVYVLLGCNQEDQQEVYAEIMAVLK--HDDQHTIN-----TQ	1567	
ATM	TDFCQTVLPLYIHDIL--LQD--TNESWRNLLSTHV---QGFFTSCLRHSQTSRSTTPA	1887	
TEL1	TAFCELVLTDLFFLSTTYDPK--SCLNWSNRIFTQI--AMLLHV-----KD-----	1697	
MEC1	NLQVDS-----LRMCYESIFRVFEYCKKWATEFKQNSKLGHTFII-----KD	1378	
ATR	DIASDL-----CQLSTQTVFMSLDLHTQWARHKFQALKAKECPHKSNNRNVDSMVS	1619	
ATM	NLDSESEHFRCCLDKKSQRTMLAVVDMRQKRPSSGTIF-----	1928	
TEL1	---SEI-----KLKMLFNVIKMRMGRSCKERNCL-----	1724	
MEC1	TKTNTMLLRIDEFLRTPSDLLAQRSLETFSEFSALEYLQCYRQNPND-----	1427	S1413F
ATR	TVDYEDYQSVTRFLDLIPQDTLAVASFRSKAYTRAVMHFESFITEKKQN-----	1668	
ATM	-----NDAFWLDLNYLEVAKVAQS-CAAHFTALLYAEIYADKKSMDQEKRSLAFE	1978	
TEL1	-----RIYSSLDLQEQICQISLKIKEFKFGYLLFEEMNM-----PN--IRE---	1762	
MEC1	-----KNQNGQLLKNLQITTYEEIGDIDSLDGVLRTFAT-GNLVSKIEEL	1470	
ATR	-----IQE---HLGFLQKLYAAMHEPDGVAGVSAIRKAEFSLKEQILEH	1709	
ATM	EGSQSTTISLSEKSKEETGISLQDLLEIYRSIGEPDSLYGCGGKMLQPITRLRTHYEH	2038	
TEL1	-----MN---INTLQKIYECINDGDFLAGLPVPHSIEGVLNSINRID	1801	
MEC1	QYSENWKLQDC---FNVLGKFSDEPKT-TTRMLKSMYDHQLYSQIISNSFSHSSDGEIS	1526	
ATR	ESLGLLRDATA---YDRAIQLEPDQIIHYHGVVKSMLGLGQLSTVI-----	1753	
ATM	E--AMWGKALVT---YDLETAIP--SSTRQAGIQALQNLGLCHI-----	2076	
TEL1	S--DTWKRFLFNNADFDANYTTS--LEEEKESLIKATEDSGFYGL-----	1842	
MEC1	LSPDVKWEYSIGLEAANLECNVQTLKNWVEQIESLRNIDDREVLQYNIKALIAISNED	1586	G1546S
ATR	-----TQVNGVHANRSEWDELNTYRVEAA-WKLSQWDLVENYLAADGKS	1797	
ATM	-----LSVYLKGLDYENKDWCPLEELHYQAA-WRNMQWDHCTSVSKEVEG-	2121	
TEL1	-----TSLLESRLSGSS-DVYKWNLELG-----DWKLLTPKVVD---	1875	
MEC1	PL-----RTQKYIHNSFRLLGTNFITSS-----KETTLLKQNL	1621	
ATR	TTWSVRLG-QLLSAKKRDIATFYDSLKLVRAEQIVPLSASF-----ERGSYQRGYEYI	1851	

ATM	TSYHESLYNALQSLRD-REFSTFYESLKYARVKEVEEMCKRSLESVYSL-----YPTL	2173	
TEL1	-SKAKGLYYAIKNLPQDVGFA-----EKSLEKSLTIFDSRQHFFISQTEWM	1920	
MEC1	MKLHSLYDLS-----FLSSAKDKFEYKSNNTTILDYRMER-IGADVPNHYYILSMRKSFD	1674	
ATR	VRLHMLCELEHSIKPLFQHS PGDSQEDS--LNWVARLEM-TQNSYRAKEPILALRRALL	1908	
ATM	SRLQAIGELE-SIGELFSRSVTHRQLSEVYIK-WQKHSQLLKDSDFSFQEPIMALRTVIL	2231	
TEL1	DTLNAIEFI-KIAAIPQD-VTS--FPQTLMSIMKADKERLNTIDFYDHKTTLKSRTLM	1976	
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MEC1	QLKMNEQADADLGKTFFFTLA-----QLARNNARL-----DIA	1706	
ATR	SLNKRDPDYNEMVGECLWQSA-----RVARKAGHH-----QTA	1940	
ATM	EILMEKEMDNSQRECIKDILT KHLVEL-----SILARTFKNTQL-	2270	
TEL1	NVLSRNSLDE-NVKCSKYLRGSI IQLANYVQLA TANGAPQDALRNATLMSKTVKNI AKL	2035	
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MEC1	S-----ESLMHCLERLPPQAELEFAEILWKQGENDRALKIVQEIHEKY-QENSSV--	1755	A1726V
ATR	Y-----NALLNAGESRLAELYVERAKWLWSKGDVHQALIVLQKGVLCFPENETPPE	1992	
ATM	--PERAIFQIKQYNSVSCGVSEWQLEEAQVFWAKKEQSLALSILKQMIKKLDASCA----	2324	
TEL1	YDDPSVVSQIEKLAS-----FTSANALWESREYKAPVMIMRDLA QNEKNISESIL	2086	
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MEC1	-----NARDRAAVLLKFTEWLDLSNNSASEQI IKQYQDIF-QIDSKWD-----	1797	
ATR	GK-----NMLIHGRAMLLVGRFMEETANFESNAIMKKYKDVT-ACLPEWE-----	2036	
ATM	ANNPS--LKLTYTECLRVCGNWLAE TCLENPAVIMQTYLEKAVEVAGNYDGESSDEL RNG	2382	
TEL1	YDDFKLLINVPMDQIKARLVKWSSESRLPEAAAIYEKIIV-----NWDINVED--HES	2137	
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MEC1	--KPYYSICL LYSRLLERKKAEGYITN-----GRFEYRA-----	1829	G1804N
ATR	--DGHFYLAKEYYDKLMPMVTDNKMEKQ-----GDL-----	2064	
ATM	KMKAFLSLARFSDTYQYRIENY-----MKSSEFENKQALLKRAKEEVGLLREHK	2431	
TEL1	CSDVFYTLGSLDEQAQKLRNSGEIEDREHRSYTGKSTLKALELIYKNTKLPENERKDAK	2197	
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MEC1	I---SYF---LLAF-----E---KNTAKVRENLPKVITF	1854	
ATR	I---RYI---VLHF-----GRSLQYGNQFIYQSMRMLTL	2093	
ATM	IQTNRYTVKQRELELDELALRALKEDRKRFLCKAVENYINCLLSGEE-HDMWVFRCLCSL	2490	
TEL1	RHYNR---VLLQYNRDESVLKALLLQKEKFLWHALHFYLN TLVFSNRYDNDI IDKFCGL	2253	
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MEC1	WLDIAAASISEAPGNRKEML--SKATEDICSHVEEALQHCPTYIWFVLTQLLSRLLHS-	1911	A1859V
ATR	WLDYGTKAYEWKAGRSRDRVQMRNDLGKINKVITEHTNYLAPYQFLTAFS QLISRICHS-	2152	
ATM	WLE-----NSGVSEVNGMMKRDMKIPYKFLPLMYQLAARMGTM	2531	
TEL1	WFE-----NDDNSKINQLLYKEIGTIPSWKFLPWNQIASKISME-	2293	
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MEC1	--HQSSAQIIMHILLSLAVEYPSHILWYITALVNSNSSKRVLRGKHIL-----E	1958	
ATR	--HDEVFVVLMEIIAKVFLAYPQQAMMMTAVSKSSYPMRVNRCKEIL-----N	2199	
ATM	MGGIGFHEVLNLLISRISMDHPHHTLFII LALA-----NANRDEF LTKPEVARRSRITK	2585	
TEL1	--ENEFAQPLQLTMKRLLYKLPYDSLVSMSILL--YEKQSNKDTNIS-----Q	2338	
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MEC1	KYRQHSQNP-----HDLVSSALDLTKALTRVCLQDVKS-IT	1993	C1985Y
ATR	KAIHMKKS L-----EKFVGDATRLTDKLELCNKPVDG-SS	2234	
ATM	NVPKQSSQLDEDRTEAANRIICTIRS-----RRPQMVRSVEALCDAYIILANLDATQWKT	2640	
TEL1	KI-----QAVKKILLELQGYDRGAFAKYLLPQVQFCEMSVELANLKFVQNTK	2386	
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MEC1	SRSGKSLEKDFKFDNMVA---PSAMVVPVRKNLDIISPL--ES-NSMRGYQPPFRP-VVS	2045	
ATR	STL--SMTSHFKMLKLVVEATFSEIILPQSVMIPTLPSILGTHANHASHEPFGHWAY	2292	
ATM	QRKGINIPAD-----QPITKLNLEDVVPTMEIKVDHT-----GEYGNLVT	2682	
TEL1	TLRLANLKIG-----QYWLKQLNMEKLP LPTSNFTVKSSAD----GRKARPYI	2430	
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MEC1	IIRFGSSYKVFSSLKKPKQLNII GSDGNIYIGIMCKK--EDVRQDNQYMFATMTDFLLSK	2103	
ATR	IAGFDDMVEILASLQPKKISLKGSDGKFYIMMCKP-KDDLKDCRLMEFNSLINKCLRK	2351	
ATM	IQSFKAEFRLAGGVNLPKIIDCVGSDGKERRQLVKG-RDDLQDAVMMQVVFQMCNTLLQR	2741	
TEL1	VSVNETVGIITTTGLSLPKIVTFNISDGTQKALMKGSNDDL RQDAIMEQVVFQVNVKVLQN	2490	
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MEC1	DIASRKRSLGINIYSVLSLREDCGILEMVPNVVTLRSILSTKYESLKIKYSLKS----L	2158	G2127E
ATR	DAESRRRELHIRTAVIPLNDECGLIEWVNNTAGLRPIILTKLYKEKGVYMTGKE----L	2406	E2130K
ATM	NETRKRRLTICTYKVVPLSQRSGVLEWCTGTVPIGEFLVNNEDGAHKRYRPNDFSAFQC	2801	
TEL1	DKVLRNLDLGI RTYKVVPLGPKAGIIEFVANSTSLHQILSKLHTND-----KITFDQA	2543	
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MEC1	HDRWQ-H--TAADGKLE-FYMEQVDKFPPIILYQWFLENFPDPINWFNARNTYARSYAVMA	2214	
ATR	RQCML-PKSAALSEKLVFRELLPRHPPIFHEWFLRTPDPTSWSYSSRSAYCRSTAVMS	2465	
ATM	QKKMMEVQKKSFEKYE-VFMDVCQNFQVFRYFCMEKFLDPAIWFEEKRLAYTRSVATSS	2860	
TEL1	RKGMKAVQTKSNEERLK-AYLKITNEIKPQLRNFDFSFPDPLDWFEAKKTYTKGVAASS	2602	
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MEC1	MVGHILGLGDRHCENI LLDIQTGKVLHVDFDCLFEKGRKLPVPEIVPFR LTPNLLDALGI	2274	
ATR	MVGYILGLGDRHGENILFDSL TGEVHVDFNCLFNKGETFEVPEIVPFR LTHNMVNGMGP	2525	
ATM	IVGYILGLGDRHVQNILINEQS AELVHIDLGVAFEQGGKILPTPETVFPFR LTRDIVDGMGI	2920	
TEL1	IVGYILGLGDRHLNILLDCSTGEP IHI DLGIAFDQKLLPIPELVFPFR LTRDIVDGFVG	2662	
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MEC1	IGTEGTFKKSSEVTLALMRKNEVALMNVIETIMYDRNMDHSIQ-----	2317	G2279K
ATR	MGTEGLFRACEVTMLRMRDQREPLMSVLKTLFLHDPLVEWSKPVKGHSAKPLNETGEVNV	2585	

ATM	TGVEGVFRRCCEKTMEVMRNSQETLLTIVEVLLYDPLFDWTMNPALKALYLQQRPEDETEL	2980	
TEL1	TGVDGLFRRCERVYAVLRKDYVKVMCVLNILKWDPLYSWVMSPVKKYEHLFEEHEITN	2722	
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MEC1	-----KALKVLRNKIRGIDPQDGLVLSVAGQTETLIQE	2350	S2339N
ATR	-----EKAKTHVLDIEQRLQGVIKTRNRVTGLPLSIEGHVHYLIQE	2626	
ATM	HPTLNADDQECKRNLSDIDQSFNKVAERVLMLRQEKLKGV--EEGTVLSVGGQVNLLIQQ	3038	
TEL1	FDN-----VSKFISNDRNENQESYRALKGVEEKL-----MGNGLSVESSVQDLIQQ	2769	
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MEC1	ATSEDNLSKMYIGWLPFW 2368		
ATR	ATDENLLCQMYLGWTPYM 2644		
ATM	AIDPKNLSRLFPGWKAWV 3056		
TEL1	ATDPSNLSVIYMGWSPFY 2787		
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