

ConSeq Results

1 MSLVLN DL LI eeeebeebbb fff s	11 CCRQLEHDRA bbeeeeeeee ss f	21 TERKKEVEKF eeeeeebeeb ff f	31 KRLIRDPETI eebbbeeeeb sf f	41 KHLDRHSDSK eebeeeeeee sf f
51 QGKYL NW DAV eeeebebebb fsf	61 FRFLQKYIQK bebbbeebbe sf f	71 ETEC L RIAKP eeeeeebeeb f f	81 NVSASTQASR ebeebeeeee f f f	91 QKKMQEISSL eeebbeebbb ff f f
101 VKYFIKCANR bebbbbebee f ss sf	111 RAPRLKCQEL eeeebebeeb f f s	121 LNYIMDTVKD beebbeebbe f	131 SSNGAIYGAD eeebbbebee s s f	141 CSNILLKDIL bbbbbbeebb s s f
151 SVRKYWCEIS ebeebbbbee fsffss	161 QQQWLELFSV eeebbeebbe fs	171 YFRLYLKPSQ bbbebeeeee fs s	181 DVHRVLVARI ebbebbbabb fs s	191 IHAVTKGCCS bbbbbebebe s s
201 QTDGLNSKFL eeeeeeeeeb ff	211 DFFSKAIQCA ebbbebbbeb s	221 RQEKSSSGLN eeeeeeebbe f	231 HILAALTIFL bbbebbbabb s	241 KTLAVNFRIR ebbbebebebe f f
251 VCELGDEILP bbebeeebbe s ff	261 TLLYIWTQHR bbbbbbbeee f	271 LNDSLKEVII eeebbeeebb f f f	281 ELFQLQIYIH ebbebebbbe f f	291 HPKGAKTQEK beeeeeeeee sf ff
301 GAYESTKWRS ebeebeebbe fs s	311 ILYNLYDLLV bbeebbebbb s	321 NEISHIGSRG eebebbbbeb f sfs	331 KYSSGFRNIA eeeeeeebbe ff f	341 VKENLIELMA beeebbebbb f s
351 DICHQVF NED ebbeebbeee f sff s	361 TRSLEISQSY eebbebeeee s	371 TTTQRESSDY eeeeeeeeee f f	381 SVPCRKKIE eeeeeebebe f f	391 LGWEVIKDHL bbbebbeeeb s f
401 QKSQ NDF DLV eeeeeebebb f f	411 PWLQIATQLI bbbebbbeeb ssfs s	421 SKYPASLPNC eebeeebeee f f f	431 ELSPLLMILS ebbebbbebe f s	441 QLLPQQRHGE ebbeeeeeee f f f f
451 RTPYVLRCLT eeebbebbe f s	461 EVALCQDKRS ebbebeeeee s sf	471 NLESSQKSDL eeeeeeeeeb s	481 LKLWNKIWCI eebbbbebbb s	491 TFRGISSEQI bbbebeeeeb f f
501 QAE NF GLLGA eeebbebbb f s	511 IIQGS LVE VD bbeebbbebe f	521 REFWKLFTGS eebbebbeee f	531 ACRPSCPAVC ebeeeeeebb ff	541 CLTLALTTSI bbbebbeebe f

551	561	571	581	591
VPGTVKMGIE	QNMCEVNRSF	SLKESIMKWL	LFYQLEGDIE	NSTEVPPILH
beeebeeeeee	eeeeeeeeeee	ebeebbbebb	bbeeeeeeee	eeeeeebbb
f				
601	611	621	631	641
SNFPHLVLEK	ILVSLTMKNC	KAAMNFFQSV	PECEHHQKDK	EELSFSEVEE
eebeeebbbe	bbbbbbbeeb	eebbebbbee	eebeeeeeee	eeeebeebbe
	ss s ff			f
651	661	671	681	691
LFLQTTFDKM	DFLTIVRECG	IEKHQSSIGF	SVHQNLKESL	DRCLLGLSEQ
bbbebbbeeb	eeeeeeeeeee	eeeeeeeeeeb	ebeeebbeeb	eebbeebbee
701	711	721	731	741
LLNYSSEIT	NSETLVRCSR	LLVGVLCGYC	YMGVIAEEEA	YKSELFQKAK
beeeeeeeeee	eeebbbebbe	bbbbbbbbbbb	bbbbbeeeee	beeebbbebe
s				f s f
751	761	771	781	791
SLMQCAGESI	TLFKNKTNEE	FRIGSLRNMM	QLCTRCLSNC	TKKSPNKIAS
ebbeebbeeb	eebeeeeeeee	eebbebbeeb	ebbeeebeee	eeeeeebbb
801	811	821	831	841
GFFLRLLTSK	LMNDIADICK	SLASFIKKPF	DRGEVESMED	DTNGNLMEVE
ebbbebbbee	bbbebbbebe	ebbeeeeeeee	eeeeeeeeeee	eeeeeeeeeee
851	861	871	881	891
DQSSMNLFND	YPDSSVSDAN	EPGESQSTIG	AINPLAEEYL	SKQDLLFLDM
eeeeeebbbe	eeeeeeeeeee	eeeeeeeeeee	bebebbbeee	eeeebebbbe
			s f	f f
901	911	921	931	941
LKFICLCVTT	AQTNTVSFRA	ADIRRKLI ML	IDSSTLEPTK	SLHLHMYLML
bebbbebbbe	eeeeebbbe	eebeeebbbe	bebebebbbe	ebbbbbbbbb
s		ss	f	f
951	961	971	981	991
LKELPGEEYP	LPMEDVLELL	KPLSNVCSLY	RRDQDVCKTI	LNHVLHVVKN
bebeeeeeeee	eeeeebbeeb	eebeebbebe	eeeeebbebb	bebebbbebe
			f ff s	s
1001	1011	1021	1031	1041
LGQSNMDSSEN	TRDAQGQFLT	VIGAFWHLTK	ERKYIFSVRM	ALVNCLKTLL
beeeeeeeee	bebeeebbe	bbbbbbbeeb	eebebebebe	bbbebbbeeb
	s	s		
1051	1061	1071	1081	1091
EADPYSKWAI	LNVMGKDFPV	NEVFTQFLAD	NHHQVRMLAA	ESINRLFQDT
eeeeebbbb	bebeeeeeeb	eebbeebbee	eeeebbbbbbb	ebbeebbeee
ff		s f	f s s	ss
1101	1111	1121	1131	1141
KGDSRLLKA	LPLKLQQTAF	ENAYLKAQEG	MREMSHSAEN	PETLDEIYNR

eeeeeeeeee	beeeeeeebb	eebbbebeee	beeebeeeeee	eeeeeeeeee
	ff s			ff ff
1151	1161	1171	1181	1191
KSVLLTLLIAV	VLSCSPICEK	QALFALCKSV	KENGLEPHLV	KKVLEKVSET
ebbbbbebbb	bbbbbeebbe	ebbbebbeeb	eeeebeeebb	eebbeebbee
ss	sf sff	f sf ff	ff	f
1201	1211	1221	1231	1241
FGYRRLEDFM	ASHLDYLVLE	WLNLDQTEYN	LSSFPPFILLN	YTNIEDFYRS
bebeebbeeb	bebbebbbbb	bbeeeeeeee	beebbebbbbe	bebeebbee
	s s	ss	sf	s f
1251	1261	1271	1281	1291
CYKVLIPHLV	IRSHFDEVKS	IANQIQEDWK	SLLTDCFPKI	LVNILPYFAY
bbebbbbebbb	bbeebbeebbe	bbeebbeeebe	ebbeebbeeb	bbbbbbbbbbb
f s	s		s sf	s s s
1301	1311	1321	1331	1341
EGTRDSGMAQ	QRETATKVYD	MLKSENLLGK	QIDHLFISNL	PEIVVELIMT
eeeeeeeeee	eeebbeebbe	bbeeeeeeee	ebbebbbbee	eebbbbebbbe
	s	fff	f fs	ssf s f
1351	1361	1371	1381	1391
LHEPANSSAS	QSTDLCDFSG	DLDPAFNPPH	FPSHVIKATF	AYISNCHKTK
beeeeeeeee	eeebbeebbe	eeeeeeeeeee	bebbbbbebbb	ebbbebeeee
f		ff ffff	s s s s	s sff
1401	1411	1421	1431	1441
LKSILEILSK	SPDSYQKILL	AICEQAAETN	NVYKKHRILK	IYHLEFVSLLL
bebbbbeebbe	eeebbebbb	bbbeebbeeee	ebbeebbbb	bbbbbbbbbbb
sff	f fss ss		sf s	s ss ss
1451	1461	1471	1481	1491
KDIKSGLGGA	WAFVLRDVIY	TLIHYNQRP	SCIMDVSLRS	FSLCCDLLSQ
eebeeebeeb	bbbbbeebbb	bbbbbbbeeee	eebeebbeeb	bbbbbeebbee
sf	ssssff ss	s s f	f fs	ss fss
1501	1511	1521	1531	1541
VCQTAVTYCK	DALENHLHVI	VGTLIPLVYE	QVEVQKQVLD	LLKYLVIDNK
bbeebbeebbe	ebbeebbebb	bbbbbeebbe	eebeeebbe	bbebbbbee
	fs ss	s f	f	ss s f
1551	1561	1571	1581	1591
DNENLYITIK	LLDPFPDHVV	FKDLRITQQK	IKYSRGPFSL	LEEINHFLSV
eeebbeebbe	eebebeeeeee	bebeebbeeee	beeeeeeebeb	eebeebbbb
s	sff f	f f	ff	s f fsss
1601	1611	1621	1631	1641
SVYDALPLTR	LEGLKDLRRQ	LELHKDQMVD	IMRASQDNPO	DGIMVKLVVN
bbbeebbeebbe	bebeebbeeee	beeeeeeebee	bbeebbeeee	eebbbbebbbe
f f	ff s	f		s
1651	1661	1671	1681	1691
LLQLSKMAIN	HTGEKEVLEA	VGSCLGEGVP	IDFSTIAIQH	SKDASYTKAL
bbeebbeebbe	eeeeeebbe	bbebbbeeebe	bebbbbbbbee	eeebbeeebb
s	ff	sff sf	s	
1701	1711	1721	1731	1741

KLFEDKELQW	TFIMLTYLNN	TLVEDCVKVR	SAAVTCLKNI	LATKTGHSFW
ebbeeeeb	bbbbbbbe	bbeeebbe	ebbbbeeb	bbeeeebbb
	f	s	f	s f f
1751	1761	1771	1781	1791
EIYKMTTDP	LAYLQPFRTS	RKKFLEVPRF	DKENPFEGLD	DINLWIPLSE
eebeeeeb	bbbbbebe	eebeebbe	eeebbebe	ebbbbbebe
f f	sf			
1801	1811	1821	1831	1841
NHDIWIKTLT	CAFLDSGGTK	CEILQLLKPM	CEVKTDFCQT	VLPYLIHDIL
eeebbeeb	bbbbbebe	eebbbeeb	beebbeeb	bbebbbblb
f s s	f	f f	s s f	sf s s
1851	1861	1871	1881	1891
LQDTNESWRN	LLSTHVQGGF	TSCLRHFSQT	SRSTTPANLD	SESEHFFRCC
beeeebbe	bbeebbeb	ebbbeebbe	eeeeebbe	eeeeebbe
f f sf	s		fff ff	
1901	1911	1921	1931	1941
LDKKSQRTML	AVVDYMRQK	RPSSGTIFND	AFWLDLNYLE	VAKVAQSCAA
eeeeebbb	bbbebebe	eeeeebbe	bbbebebe	bbeebbebe
fff s	s f f f	f f f	ss s f	s sf fs
1951	1961	1971	1981	1991
HFTALLYAEI	YADKKSMDQ	EKRSLAFEEG	SQSTTISSLS	EKSKEETGIS
bbbbbbbeb	bbeebbebe	eeebbebe	eebebebe	eeeeebbe
ssss ss fs	f		ff f f	
2001	2011	2021	2031	2041
LQDLLEIYR	SIGEPDSLYG	CGGGKMLQPI	TRLRTYEHEA	MWGKALVTYD
beebbebe	bbeebbeb	beebbeeb	beebbeeb	ebbebbbbe
f s s	ssffffsfs	f f	f ffsfff	fss ssf
2051	2061	2071	2081	2091
LETAIPSSSTR	QAGIIQALQN	LGLCHILSVY	LKGLDYENKD	WCPELEELHY
beebbebe	ebbbbebe	bebbbblb	beebbeeb	bbeebbebb
f	s ff	fs s s	fs	f f
2101	2111	2121	2131	2141
QAAWRNMQWD	HCTSVSKEVE	GTSYHESLYN	ALQSLRDREF	STFYESLKYA
ebbebebe	eeeeebbe	eeeeebbe	bbeebbeeb	eebeebbeb
f s f		f f	fs f f	
2151	2161	2171	2181	2191
RVKEVEEMCK	RSLESVYSLY	PTLSRLQAIG	ELESIGELFS	RSVTHRQLSE
eeebbeeb	ebbeebbeb	ebbeebbe	ebbeebbe	eebeebbe
f fs	sff f s	f s sf	f	
2201	2211	2221	2231	2241
VYIKWQKHSQ	LLKDSDFSQ	EPIMALRTVI	LEILMEKEMD	NSQRECIKDI
bbeebbebe	bbeebbebe	bbbbbbblb	bebbbeeb	eeeeebbeb
	ff	ss s		
2251	2261	2271	2281	2291
LTKHLVELSI	LARTFKNTQL	PERAIFQIKQ	YNSVSCGVSE	WQLEEAQVFW
beebbebe	bbeebbebe	beebbebe	eeeeebbe	bebeebbbb
fs	sf f f f	sf s f		sffsf s

2301	2311	2321	2331	2341
AKKEQSLALS	ILKQMIKKID	ASCAANNPSL	KLTYTECLRV	CGNWLAEETCL
eeeeeebbbe	bbeebbbee	eebeeeeeeb	eebbbebbbe	beebbbebbe
f f s	s		sf	f s f
2351	2361	2371	2381	2391
ENPAVIMQTY	LEKAVEVAGN	YDGESSDELRL	NGKMKAFSL	ARFSDTQYQR
eeeebbbeeb	beebbbebee	eeeeeeeeee	eeebbebbbbb	bebeeeeb
fff s	f		f s sss	sfsff fsf
2401	2411	2421	2431	2441
IENYMKSSSEF	ENKQALLKRA	KEEVGLLREH	KIQTNRYTVK	VQRELELDEL
beebbeeeeb	eeeeebbeeb	eebeebbeee	eeeeeebbbe	beeeeeeeee
s f s fff	fff	f f	fs	s f f
2451	2461	2471	2481	2491
ALRALKEDRK	RFLCKAVENY	INCLLSGEEH	DMWVFRLLCSL	WLENSGVSEV
bbbebeeeeb	ebbbebbbeeb	beebbeeeeb	ebbbbbbbbbb	bbbeeebeeb
s f ss fs fs	ss fs fs	ss f f	f ss ss	ss f
2501	2511	2521	2531	2541
NGMMKRDGMK	IPYKFLPIM	YQLAARMGTK	MMGGLGFHEV	INNLIISRISM
eebbeeebee	beebbbebb	beebbeebbe	eeebbbeeb	beebbbebbe
f	s f fssfs	sfssffs ff	s	s s
2551	2561	2571	2581	2591
DHPHHTLFII	LALANANRDE	FLTKPEVARR	SRIKTNVPKQ	SSQLDEDRT
eeebbbbbb	bbbbeeeeb	eeeeeeeeeb	eebeeeeb	eeeeeebe
sffs s ss	ss fffff			f f f
2601	2611	2621	2631	2641
AANRIICTIR	SRRPQMVRVS	EALCDAYIIL	ANLDATQWKT	QRKGINIPAD
bbbebbbeeb	eeeeebbeeb	eebbebbbbb	bbbeeeeb	eeebbebeeb
s		f s sss	s ff	f sf
2651	2661	2671	2681	2691
QPITKLKLE	DVVVPTMEIK	VDHTGEYGNL	VTIQSFKAEF	RLAGGVNLPK
eebebeeb	ebbbebbbe	beeeebbeeb	bbbebbbeeb	eebebbbeeb
ff	s fs	sf ff f f	s	s fs f ff
2701	2711	2721	2731	2741
IIDCVGSDGK	ERRQLVKGRD	DLRQDAVMQQ	VFQMCNTLIQ	RNTETRKRL
bbbebeeb	eeeebeeb	eebeebbeeb	bbbebbbeeb	eeeeeeeb
ssfs sfff	ffffsff f	fsfffsssf	ss sss ss	f fff ffs
2751	2761	2771	2781	2791
TICTYKVVPL	SQRSGVLEWC	TGTVPIGEFL	VNNEDGAHKR	YRPNDFAFQ
eebebbbeeb	eeeebbbeeb	eebebbbeeb	beeeebbeeb	beeebeeb
sffsfs f	fffff sfss	ff f s s	fff f	ff f
2801	2811	2821	2831	2841
CQKKMEVQK	KSFEKYEVEF	MDVCQNFQPV	FRYFCMEKFL	DPAIWFEKRL
beeebeeb	eebeebbeeb	eebeebbeeb	bbbbbbeeb	eebbbbeeb
sf s	f	s fs	s s ffs	ffs s f s
2851	2861	2871	2881	2891
AYTRSVATSS	IVGYILGLGD	RHVQNILINE	QSAELVHIDL	GVAFEQKIL

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ebbebbbbbb bbbbbbbbbbb ebbbbbbbee ebeebbbbeb bbbbeebbee
fssfssssss sssss ssss fs ssss f ffs ssfs sssffsfff
2901          2911          2921          2931          2941
PTPETVPFRL TRDIVDGMGI TGVEGVFRRCEKTMEVMRNSQETLLTIVE
eeeeebbebeb beebbbbbbbb bbbeebbeeb beebbeebbee beebbbebbe
ffffffsfsfs ff sssss ssffssffs sffss ssf sff fssf
2951          2961          2971          2981          2991
VLLYDPLFDW TMNPLKALYL QQRPEDETEL HPTLNADDQE CKRNLSIDQ
bbbbbbbbbeb beeebebbbeb eeeeeeeeeeb ebebeeeeeee eeeeeeeeeee
sss sss fs sfff fs s f f f f
3001          3011          3021          3031          3041
SFNKVAERVL MRLQEKLGVEEGTVLSVGG QVNLLIQQAI DPKNLSRLFP
ebeebbeebb eebeeebeee eeeebbebeb ebbbbbeebe eeebeebbe
f ffssffss fsfffsfff f f ssfs s fss ssffs ff fsf s
3051
GWKAWV
ebeeee
fsf f

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Legend:**The conservation scale:**

1 2 3 4 5 6 7 8 9

Variable Average Conserved

- e** - An exposed residue according to the neural-network algorithm.
- b** - A buried residue according to the neural-network algorithm.
- f** - A predicted functional residue (highly conserved and exposed).
- s** - A predicted structural residue (highly conserved and buried).
- x** - Insufficient data - the calculation for this site was performed on less than 10% of the sequences.