ConSurf Results for job:kq date:26/08/2025

1	11	21	31	41
MPGTGLGRLA	KRMTAAAAVF	LISSGAVLPA	QAATTAGHTP	STAPAAP <mark>T</mark> DK
eeeebeebe	e b b b b b b b b	bbbebbee	eeeeeeee	e e e e e e e e
51	61	71	81	91
HAITTADNGN	LHTWWHDNAV	F <mark>N</mark> TTGPTGND	EVRRSSFYDL	QVAQENQPDK
e e e e e e e e e	bebbbeeeee ss f	eeeeeebee	ebeebebeeb sf s f	ebbeeeeee s
101	111	121	131	141
AYDAFTYMSI eeebbbbbbbb	PRSGKDKIGY	TKEDGAEFSS eeeeebebee	QAGLTMSWSS ebebbbbbbb	FEYAKDVWVD bebbeebbbe
ss s	eeeeeeeee ff f f f	ffsf	SSS	sf f s
151	161	171	181	191
V S L R T G Q T I T	SADQVQIRPS	SYNFEKQLVD		SDAGYRFSVE
bebeeeebe	ebeebebeee f s ff	eeebeeeee	eeebebebee f sf	eeeebebbbe f f ssf
201	211	221	231	241
FEPQLYTAYN	DMSGDSGKLT	TEAEGNRAIH	TEPRNSMMIF	AEPKLRGEQK
beeebbebee s f f	eeeeeeeee f	eeeeeebe	eeeeebbbbb ff f s	beeeeeeee sff
251	261	271	281	291
ERLVPTEESG	SIHYPAEGEV	TNLNAVTEEI	IYFKPGTYSM	GSDYHAVLPP
eeebeeeee f	ebeeeeeeb f	e e b e e b e e e b	bbbebbebbb s s s s	bbeeebebee
301	311	321	331	341
NVKWVYLAPG	AYVKGAFR <mark>F</mark> L	HDNQSQY <mark>KV</mark> T	G <mark>Y</mark> GV <mark>L</mark> SGEQY	VYEADTNNNY
		HDNQSQY <mark>KV</mark> T		
NVKWVYLAPG ebebbbbbee	AYVKGAFRFL bbbebbebe	HDNQSQYKVT eeeeebebe	GYGVLSGEQY bbbbeeeeb	VYEADTNNNY beeeeeeee
NVKWVYLAPG ebebbbbbee s sff 351 NHLSGASNCH	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA	HDNQSQYKVT eeeeebebe f f 371 SADAEQKLDL	GYGVLSGEQY bbbbbebeeb s ss fsffs 381 QGVTVAEPPY	VYEADTNNNY beeeeeee ff ff ff 391 HSFVVYGNEQ
NVKWVYLAPG ebebbbbbee s s sff	AYVKGAFRFL bbbebbebe s sfss s	HDNQSQYKVT eeeeebebe f f	GYGVLSGEQY bbbbbebeeb s ss fsffs 381	VYEADTNNNY beeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbeee
NVKWVYLAPG ebebbbbbee s s sff 351 NHLSGASNCH eeeeeeebe	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebbebe	HDNQSQYKVT eeeeebebe f f 371 SADAEQKLDL eeeeebebeb	GYGVLSGEQY bbbbbebeeb s ss fsffs 381 QGVTVAEPPY eebebeeeee	VYEADTNNNY beeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbeee
NVKWVYLAPG ebebbbbbee s s sff 351 NHLSGASNCH eeeeeeeebe sf	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebbebe ssf sf	HDNQSQYKVT eeeeebebe f f 371 SADAEQKLDL eeeeeebeb f s	GYGVLSGEQY bbbbbebeeb s ss fsffs 381 QGVTVAEPPY eebebeeeee f f fff	VYEADTNNNY beeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbeee fsss
NVKWVYLAPG ebebbbbbee s ssff 351 NHLSGASNCH eeeeeebe sf	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebbebe ssf sf 411 QVGSWYWQTD	HDNQSQYKVT eeeeebbebe f f 371 SADAEQKLDL eeeeeebbb f f s	GYGVLSGEQY bbbbbebeeb s ss fsffs 381 QGVTVAEPPY eebebeeee f f fff	VYEADTNNNY beeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbeee fsss 441 VLKMYHSDVT
NVKWVYLAPG ebebbbbbee s sff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebeebe	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebebe ssf sf 411 QVGSWYWQTD ebbebebeee	HDNQSQYKVT eeeeeebebe ff 371 SADAEQKLDL eeeeeebeb f fs 421 GIELYKGSTM bbebbeeeeb	GYGVLSGEQY bbbbbebeeb s ss fsffs 381 QGVTVAEPPY eebebeeee f f fff 431 KNTFFNANDD eeebbebeee	VYEADTNNNY beeeeeeeee ff ff f 391 HSFVVYGNEQ ebbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe
NVKWVYLAPG ebebbbbbee s ssff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebeebe ff	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebebe ssf sf 411 QVGSWYWQTD ebbebebee fss sf fff	HDNQSQYKVT eeeeeebebe ff 371 SADAEQKLDL eeeeeebeb ff fs 421 GIELYKGSTM bbebbeeeeb s f s f	GYGVLSGEQY bbbbbebeeb s ss fsffs 381 QGVTVAEPPY eebebeeee f f fff 431 KNTFFNANDD eeebbebeee f s f fff	VYEADTNNNY beeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe f sff
NVKWVYLAPG ebebbbbbee s sff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebeebe f f	AYVKGAFRFL bbbebbebes sfss 361 SCVKMLQFA eebbebbebe ssf sf 411 QVGSWYWQTD ebbebebeee fss sf fff 461 NGPVIQWGWT	HDNQSQYKVT eeeeeebebe f f 371 SADAEQKLDL eeeeeebeb f f s 421 GIELYKGSTM bbebbeeeeb s f s f	GYGVLSGEQY bbbbbebeeb s ss fsffs 381 QGVTVAEPPY eebebeeee f f fff 431 KNTFFNANDD eebbeeee f s f fff	VYEADTNNNY beeeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe f sff
NVKWVYLAPG ebebbbbbee s sff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebeebe ff 451 IDNTVIWKNE beebbbbeee sff	AYVKGAFRFL bbbebbebessfssss 361 SSCVKMLQFA eebbebbebessfsf 411 QVGSWYWQTD ebbebebeeefsssfff 461 NGPVIQWGWT eeeebbbbe	HDNQSQYKVT eeeeeebebe ff 371 SADAEQKLDL eeeeeebeb ff fs 421 GIELYKGSTM bbebbeeeb s f s f 471 PRNIDNVNVT eeebeebebe	GYGVLSGEQY bbbbbbeeeb s ss fsffs 381 QGVTVAEPPY eebebeeee f f fff 431 KNTFFNANDD eeebbeeee f s f fff 481 NTTVIHNRMY ebbbbbbbbbb	VYEADTNNNY beeeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe f sff
NVKWVYLAPG ebebbbbee s sff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebeebe f f 451 IDNTVIWKNE beebbbbeee s sf f	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebbebe ssf sf 411 QVGSWYWQTD ebbebebeee fss sf fff 461 NGPVIQWGWT eeeebebbbe ffff f ss	HDNQSQYKVT eeeeeebebe fff 371 SADAEQKLDL eeeeeebebe fffs 421 GIELYKGSTM bbebbeeeeb sfsfsf 471 PRNIDNVNVT eeebeebebe f	GYGVLSGEQY bbbbbbeeebsssfsffs 381 QGVTVAEPPY eebebeeee ffff 431 KNTFFNANDD eeebbebeee fsffff 481 NTTVIHNRMY ebbbbbbbbb sssss	VYEADTNNNY beeeeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe f sff 491 WKDVKYNTCI beeeeeebb f ff
NVKWVYLAPG ebebbbbbee s sff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebeebe ff 451 IDNTVIWKNE beebbbbeee sff	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebbebe ssf sf 411 QVGSWYWQTD ebbebebeee fss sf fff 461 NGPVIQWGWT eeeebebbbe ffff f ss	HDNQSQYKVT eeeeeebebe ff 371 SADAEQKLDL eeeeeebebe f fs 421 GIELYKGSTM bbebbeeeeb s f s f 471 PRNIDNVNVT eeebeebebe f	GYGVLSGEQY bbbbbbeeebsssfsffs 381 QGVTVAEPPY eebebeeee f f fff 431 KNTFFNANDD eeebbebeee f s f fff 481 NTTVIHNRMY ebbbbbbbbbbsssss	VYEADTNNNY beeeeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe f sff 491 WKDVKYNTCI beeeeeebb f ff
NVKWVYLAPG ebebbbbee s sff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebeebe f f 451 IDNTVIWKNE beebbbbeee s sf f	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebebe ssf sf 411 QVGSWYWQTD ebbebebeee fss sf fff 461 NGPVIQWGWT eeeebebbbe ffff f ss 511 GSTTKADPNT eeeeeeee	HDNQSQYKVT eeeeeebebe ff 371 SADAEQKLDL eeeeeebebe ff fs 421 GIELYKGSTM bbebbeeeeb s fs f 471 PRNIDNVNVT eeebeebebe f	GYGVLSGEQY bbbbbebeebs ssfsffs 381 QGVTVAEPPY eebebeeee f f ffff 431 KNTFFNANDD eeebbebeee f s f ffff 481 NTTVIHNRMY ebbbbbbbbbsssss	VYEADTNNNY beeeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe f sff 491 WKDVKYNTCI beeeeeebb f ff
NVKWVYLAPG ebebbbbbee s sff 351 NHLSGASNCH eeeeeeebe sf 401 TFHMNVENYK ebebebebe ff 451 IDNTVIWKNE beebbbbeee s sf f 501 LNSSSHWEDM bebeeebee ff f	AYVKGAFRFL bbbebbebe s sfss s 361 SSCVKMLQFA eebbebbebe ssf sf 411 QVGSWYWQTD ebbebebeee fss sf fff 461 NGPVIQWGWT eeeebebbbe ffff f ss 511 GSTTKADPNT eeeeeeef 561	HDNQSQYKVT eeeeeebebe ff 371 SADAEQKLDL eeeeeebebeb f s 421 GIELYKGSTM bbebbeeeeb s f s f 471 PRNIDNVNVT eeebeebebe f	GYGVLSGEQY bbbbbeeebsssfffs 381 QGVTVAEPPY eebebeeee fffff 431 KNTFFNANDD eeebbebeee fsffff 481 NTTVIHNRMY ebbbbbbbbbbbsssss 531 TVEGMTNCAI ebeebbebbb fff 581 GEKVTIGNEI	VYEADTNNNY beeeeeeeee ff ff ff 391 HSFVVYGNEQ ebbbbbbeee fsss 441 VLKMYHSDVT bbebbeeebe fsff 491 WKDVKYNTCI beeeeeebb fff 541 RVYALSDTEN bbbbeeee s f 591



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.