Article

Leishmanicidal action of the Peptides 19-4LF, 19-2.5 and 19-2.5LF topically administered on cutaneous lesions caused by *Leishmania major*

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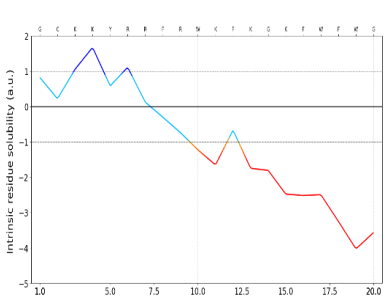
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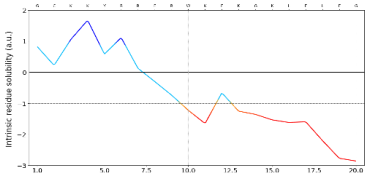
Aqueous solubility for 19-2.5, 19-2.5LF and 19-4LF

As shown below, a brief *in-silico* comparison of predicted aqueous solubility for the three peptides (e.g., pI/charge-based and sequence-based predictors) suggests that 19-2.5, 19-2.5LF and 19-4LF may exhibit good water solubility. In fact, solubility can be analyzed (**Fig. S1**) by useful tools such as Innovagen PepCalc [38, 39], CamSol-PTM [40] and the MahLool solubility prediction tool [41], available at https://pepcalc.com, https://www-cohsoftware.ch.cam.ac.uk/index.php, and www.peptide.bio, respectively.

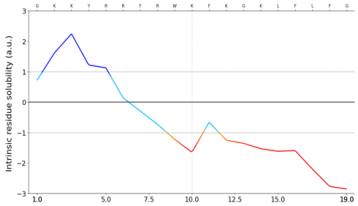
The three peptides are predicted to be water-soluble by charge/pI-based estimation (PepCalc) and by a learned solubility classifier (MahLooL; 83–91% probability). Through additional studies, CamSol-PTM intrinsic solubility at pH 7.4 differentiates the sequences: 19-2.5 shows a moderately reduced intrinsic solubility score (−0.74) compared to 19-2.5LF (+0.21) and 19-4LF (+0.26). In CamSol-style scoring, negative values indicate solubility-limiting sequence features, while values near 0 indicate negligible net effect, and scores below −1 are commonly interpreted as poor solubility signals.



19-2.5



19-2.5LF



19-4LF

Peptide	CamSol-PTM intrinsic solubility (pH 7.4)	Innovagen PepCalc pI	Net charge (pH 7)	PepCalc estimated solubility	MahLooL / peptide.bio classification	MahLooL probability
19-2.5	−0.737534	11.54	7.9	Good water solubility	Soluble	91%
19-2.5LF	+0.207398	11.54	7.9	Good water solubility	Likely soluble	83%
19-4LF	+0.257793	11.96	8.0	Good water solubility	Likely soluble	83%

Figure S1. Predicted aqueous solubility for 19-2.5, 19-2.5LF and 19-4LF.

References

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