

Detection of KF-8 Optical Rotation

Different batches of KF-8 solutions with a final concentration of 0.03 mM and 0.1 mM were prepared, and the optical rotation of the solution was measured using a polarimeter (Shanghai INESA Physico-Optical Instrument Co.,Ltd., SGW®-2) at 0 h and 24 h at 4°C, respectively. The polarimeter was calibrated using ddH₂O. Different concentrations of KF-8 solutions were poured into 100 mm test tubes and then placed in a polarimeter to measure their optical rotations. Different concentrations of KF-8 were independently replicated 6 times for optical rotation, respectively.

Product batch	Group	Time	0.03 mM KF-8
04010016068-2017	0.03 mM KF-8	0 h	0.0115±0.001225
		24 h	0.011±0.001035
	0.1 mM KF-8	0 h	0.011333±0.001033
		24 h	0.011±0.001095
04010016068-2019	0.03 mM KF-8	0 h	0.01
		24 h	0.012±0.0015119
	0.1 mM KF-8	0 h	0.01
		24 h	0.011±0.001025

KF-8 Stability

The optical rotation of KF-8 was measured with a polarimeter, and it was found that its optical rotation of KF-8 was close to 0, whatever the KF-8 product batch is, indicating that the peptide may be a mesomer. Furthermore, we found no significant difference in optical rotation of KF-8 solution at 0 h and 24 h at 4°C, indicating that KF-8 has excellent stability during general experimental conditions.