**Supplementary Table 1.** **S2S3 peptides information.**

Hydrophobicity of each peptide was estimated by Peptide 2.0 Inc (https://www.peptide2.com/N\_peptide\_hydrophobicity\_hydrophilicity.php).

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| --- | --- | --- | --- |
| **ISOFORM** | **SEQUENCE** | **PURITY** | **HIDROPHOBICITY** |
| KV7.1 | Ac-RLWSAGCRSKYVGLWGRLRFARKP-NH2 | >95% | 41.7% |
| KV7.2 | Ac-RIWAAGCCCRYRGWRGRLKFARKP-NH2 | >95% | 37.5% |
| KV7.3 | Ac-RIWAAGCCCRYKGWRGRLKFARKP-NH2 | >95% | 37.5% |
| KV7.4 | Ac-RVWSAGCCCRYRGWQGRFRFARKP-NH2 | >95% | 33.3% |
| KV7.5 | Ac-RIWSAGCCCRYRGWQGRLRFARKP-NH2 | >95% | 33.3% |