

Supporting Information

Development of Molecularly Imprinted Polymers for the Detection of Human Chorionic Gonadotropin

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Supporting Tables

Table S1. Epitope properties

Sequence	Sequence length	Hydrophobicity	GRAVY	Mw average (g/mol)	Theoretical pI
SIRLPGCPRGVNPVV	15	28	0.30	1564	10.9
PGPSDTPILPQ	11	23	-0.64	1121	3.1

a) <https://www.thermofisher.com/se/en/home/life-science/protein-biology/peptides-proteins/custom-peptide-synthesis-services/peptide-analyzing-tool.html>

Table S2. Functional monomer feed ratio (mole %) used for MIP synthesis.

Entry	NIPAm	BIS	TBAm	APM	AAc	FITC-AAm
MIP-SV	45	5	40	5	5	0.8 mg
MIP-PQ	48	2	40	10	0	0.4 mg

Supporting Figures

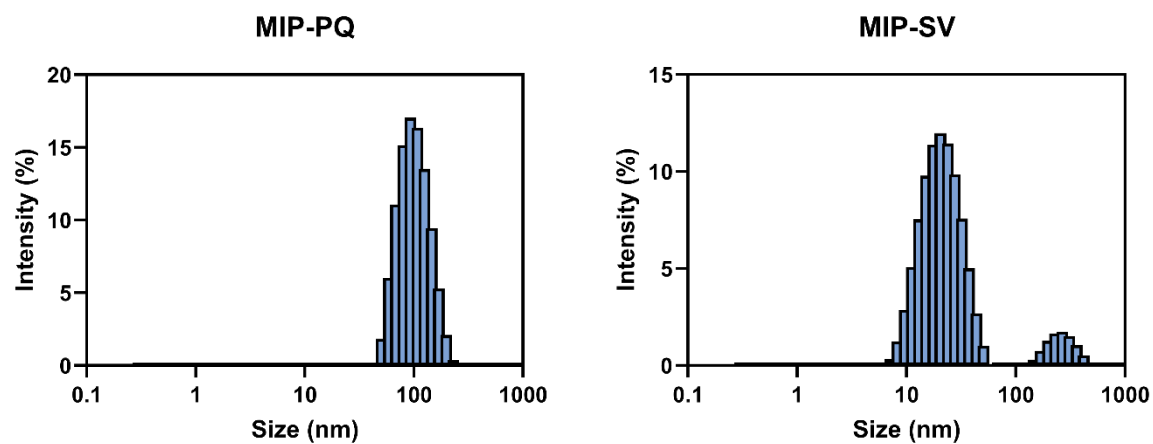


Figure S1. DLS size distribution of MIP-SV and MIP-PQ.

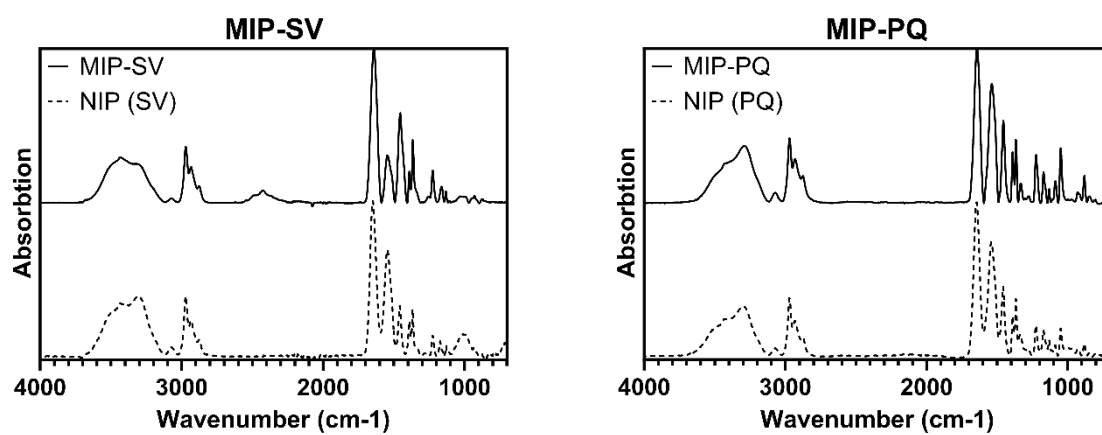


Figure S2. Fourier transform infrared (FTIR) spectroscopy of MIP-SV and MIP-PQ and corresponding NIPs.

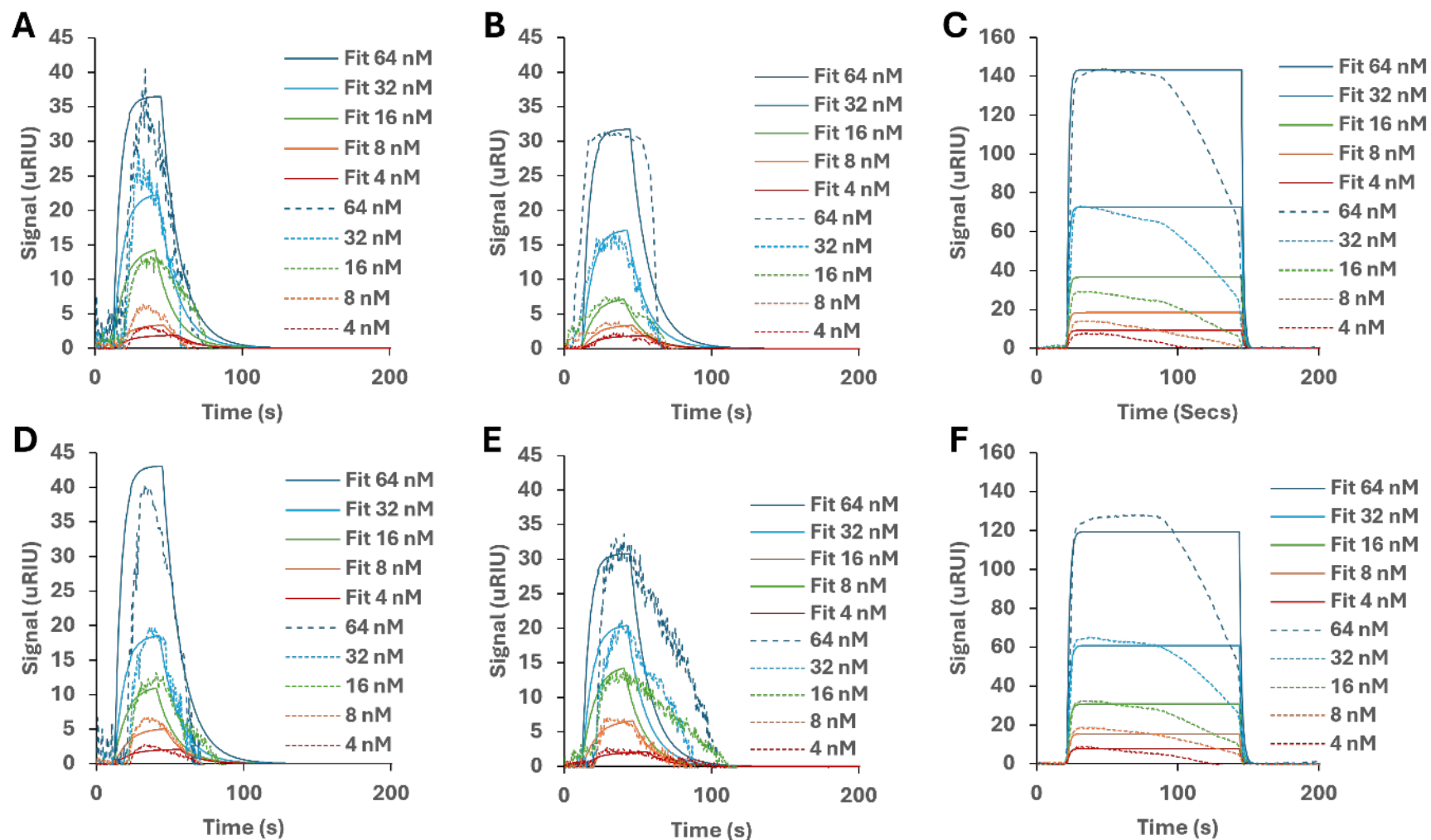


Figure S3. Representative fitted SPR curves showing the rebinding of the target and non-target peptides to the immobilized nanogel with five concentrations of the analyte in PBST. (A-C) SV, PQ and hCG binding to MIP-SV; (D-F) PQ, SV and hCG binding to MIP-PQ.

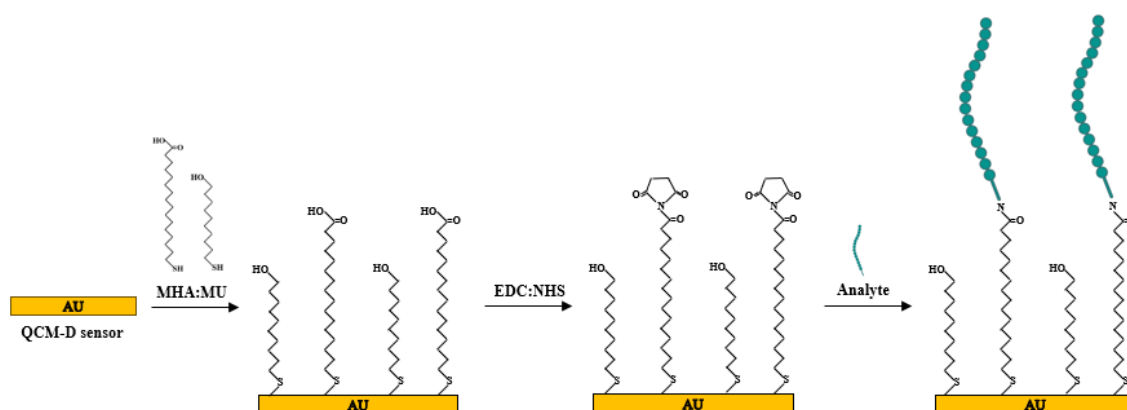


Figure S4. The process of QCM sensor chip modification with the target peptide.

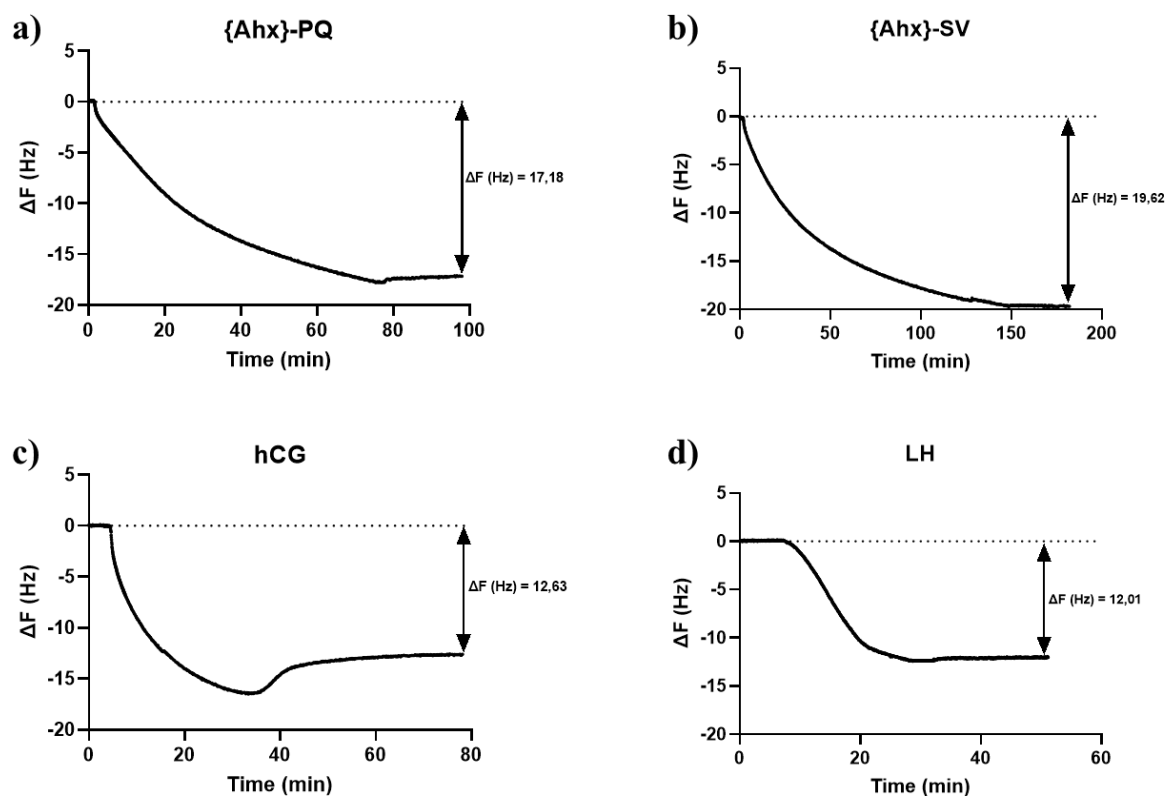


Figure S5. Analyses of QCM-D sensor modification with a) Ahx-PQ, b) Ahx-SV, c) hCG and d) LH. Ahx-PQ and Ahx-SV are the PQ and SV peptides conjugated with the N-acetylated-6-aminohexanoyl (Ahx) moiety at the N-termini.