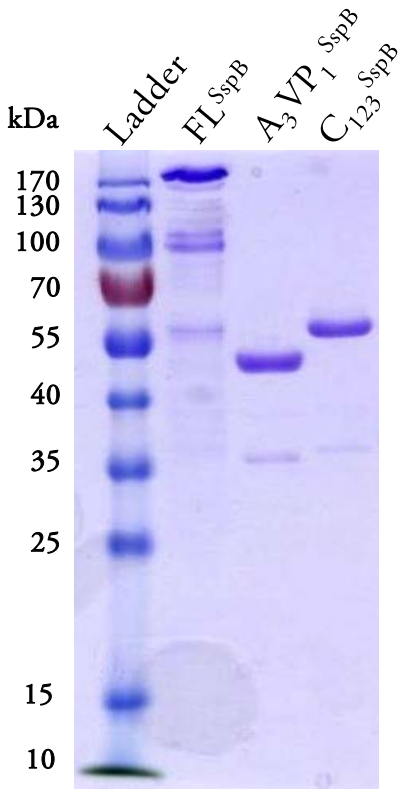

Figure S1 Recombinantly expressed and purified fragments of *S. gordonii* DL1 FL^{SspB}, $A_3VP_1^{SspB}$, and C_{123}^{SspB} stained with coomassie blue on a 12.5% SDS-PAGE gel.

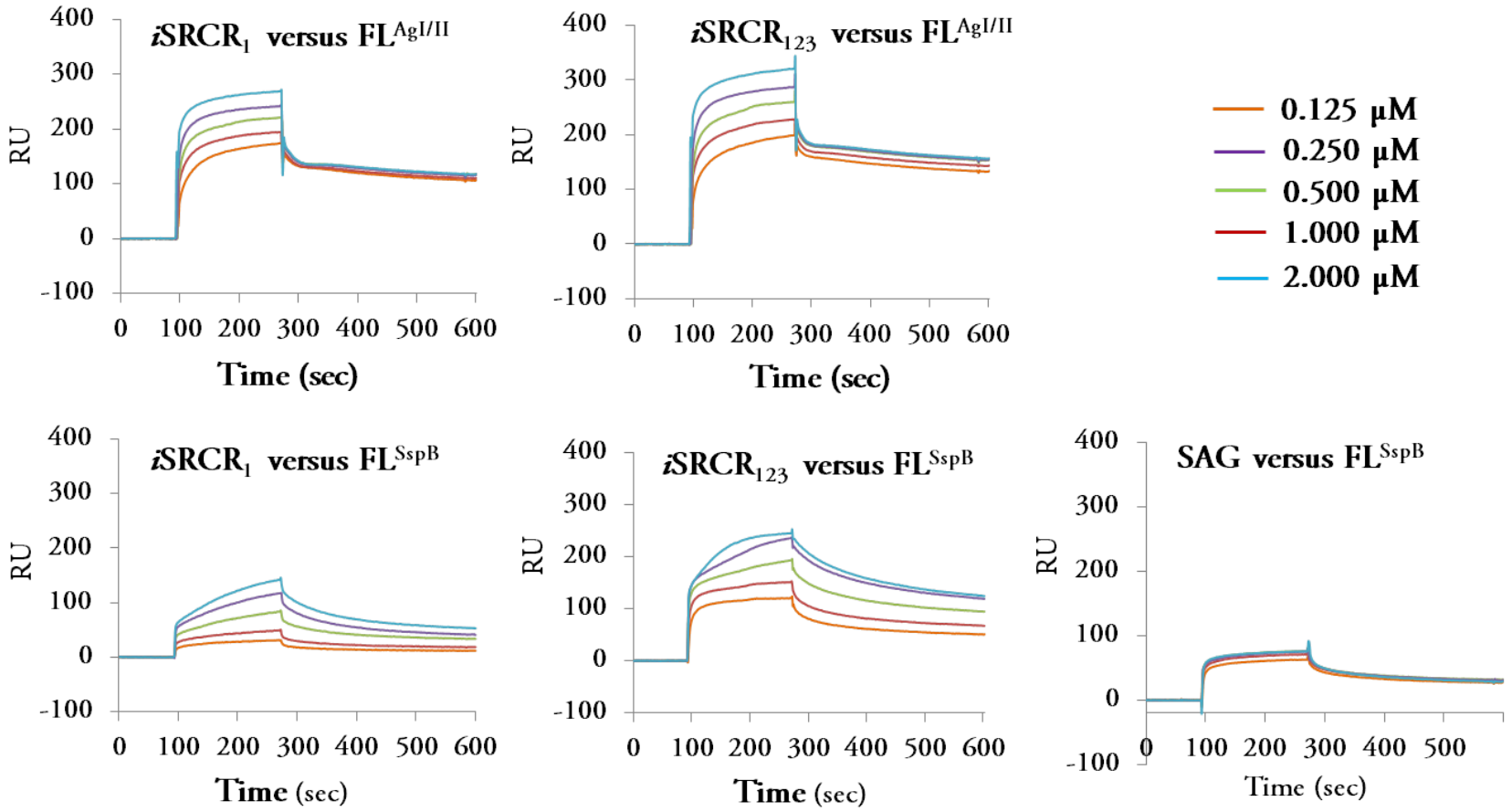

Figure S2A. Sensorgrams from surface plasmon resonance studies showing the interaction of $FL^{AgI/II}$ and FL^{SspB} at various concentrations with immobilized *i*$SRCR_1$, *i*$SRCR_{123}$ and SAG.

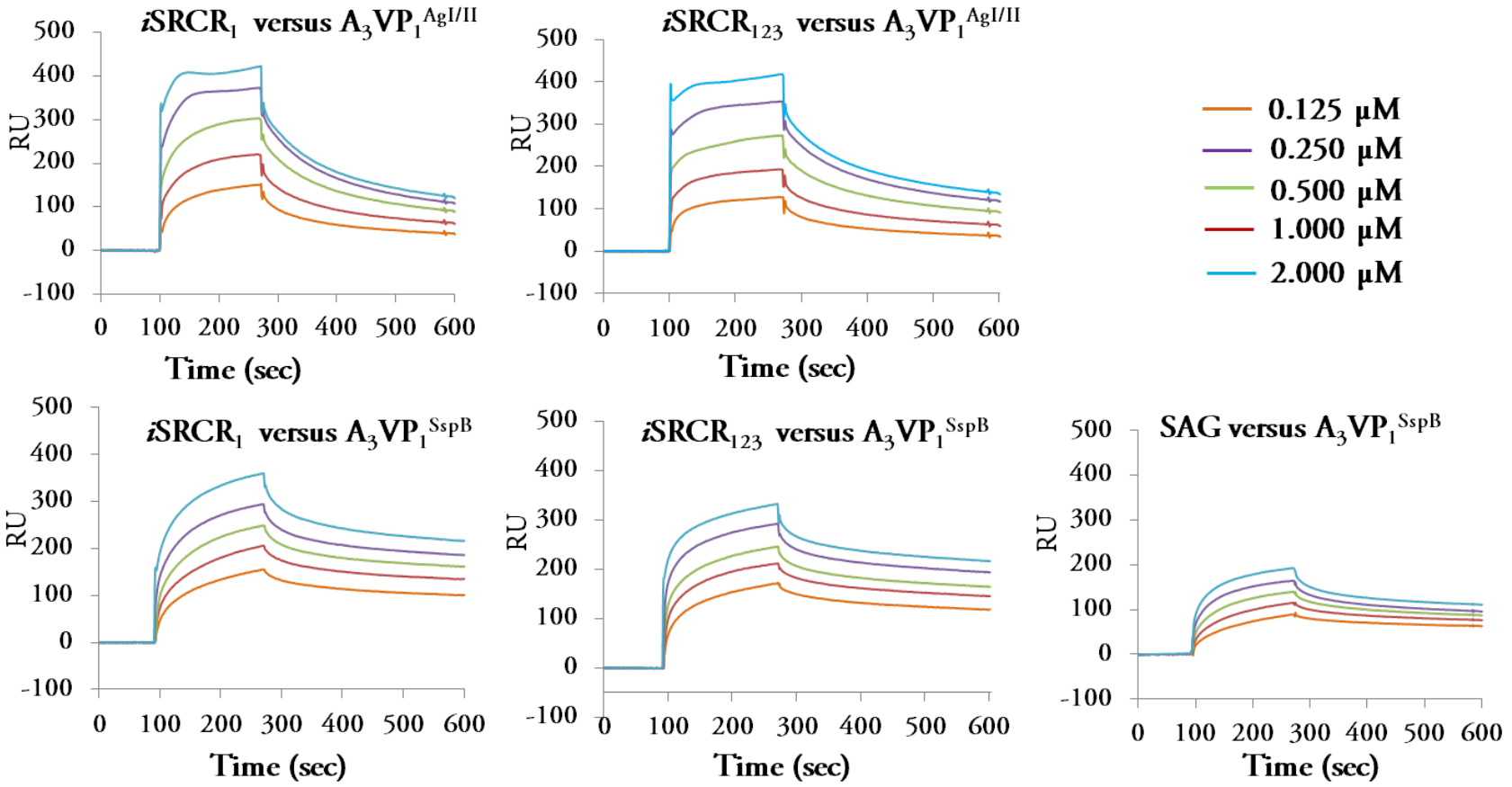

Figure S2B. Sensorgrams from surface plasmon resonance studies showing the interaction of $A_3VP_1^{AgI/II}$ and $A_3VP_1^{SspB}$ at various concentrations with immobilized *i*$SRCR_1$, *i*$SRCR_{123}$ and SAG.

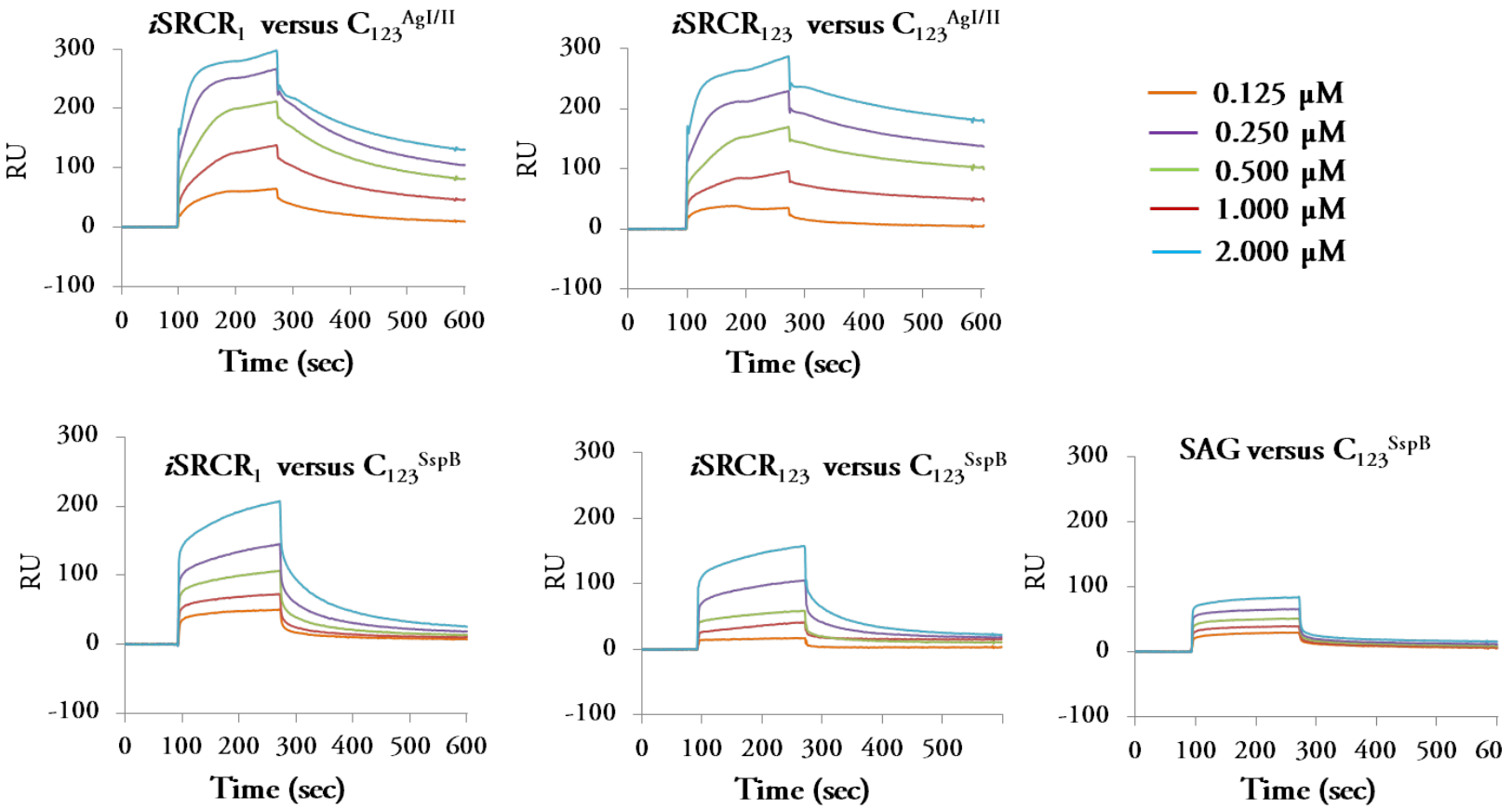

Figure S2C. Sensorgrams from surface plasmon resonance studies showing the interaction of $C_{123}^{AgI/II}$ and C_{123}^{SspB} at various concentrations with immobilized *i*$SRCR_1$, *i*$SRCR_{123}$ and SAG.

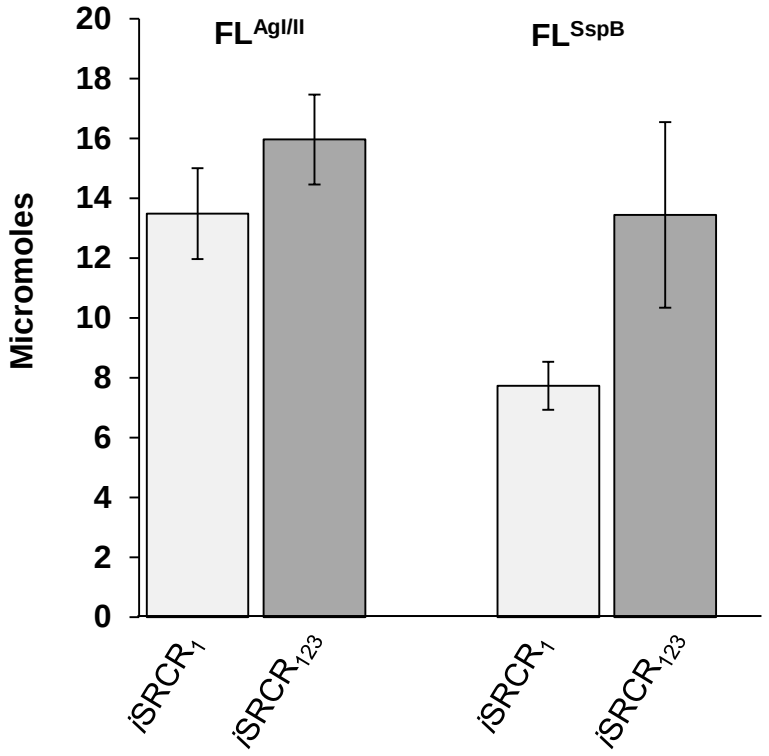

Figure S3: Concentration of $FL^{AgI/II}$ and FL^{SspB} bound to immobilized *i*$SRCR_1$ and *i*$SRCR_{123}$ on CM5 sensor chip.

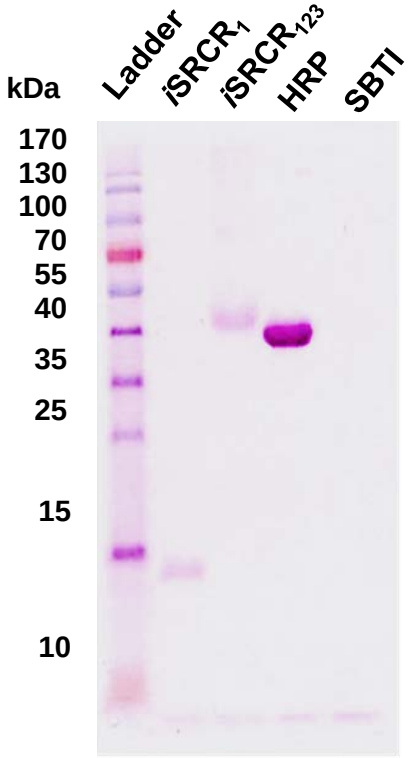

Figure S4. Glycoprotein stained SDS-PAGE gel containing *i*SRCR's, horse radish peroxidase (HRP, positive control) and soybean trypsin inhibitor (SBTI, negative control).

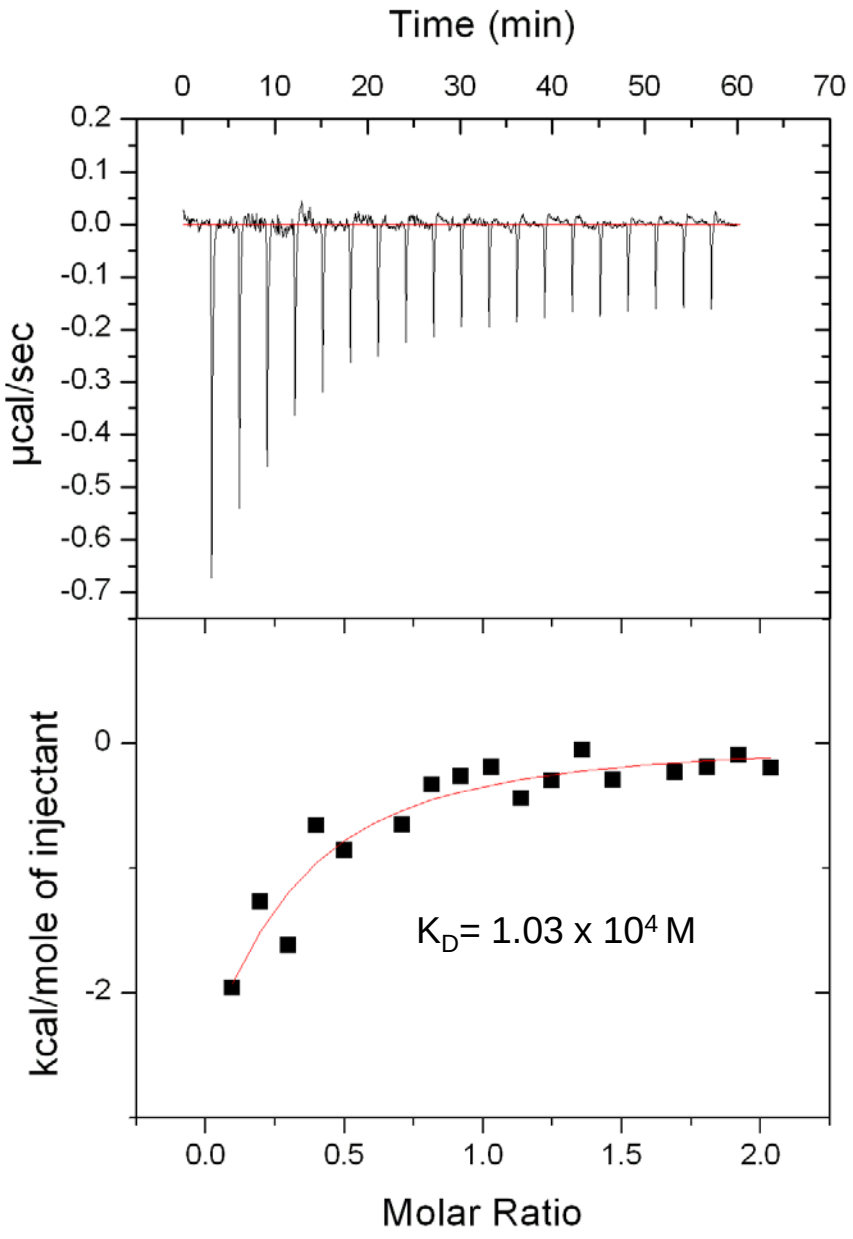

Figure S5. Binding of *i*SRCR$_{123}$ in solution with FL$^{AgI/II}$. *S1 Methods*. Calorimetric titrations of *i*SRCR$_{123}$ with FL$^{AgI/II}$ was performed using Auto-ITC titration calorimetry (MicroCal, LLC). The *i*SRCR$_{123}$ at a concentration of 20 µM of 400 µl was loaded onto calorimetric cell and FL$^{AgI/II}$ of 200 µM of 120 µl at 10 fold higher concentration to that of cell concentration was loaded in syringe. Buffer containing 20 mM HEPES, 150 mM NaCl and 2.5 mM $CaCl_2$ and temperature of 25°C was maintained throughout the experiment. After the initial injection of 1 µL, 19 injections of 6 µl each from the syringe was injected at 300 seconds interval. Similarly, for control instead of FL$^{AgI/II}$ in syringe, buffer was titrated against SRCRs in the cell. The heat evolved or absorbed during the reaction between the titrant and reactant was noted and the resulting data was fit to a single binding site model using Origin software (Version 7.0383 with MicroCal ITC-analysis module) from which the Kd was calculated. *Result:* The ITC experiment clearly indicated the weak millimolar level binding of *i*SRCR$_{123}$ in solution (K_D = 1.03 × 10^4 M) with FL$^{AgI/II}$. The data fit had very large chi^2 values, and this is indicative of non-specific interactions with very weak affinity.

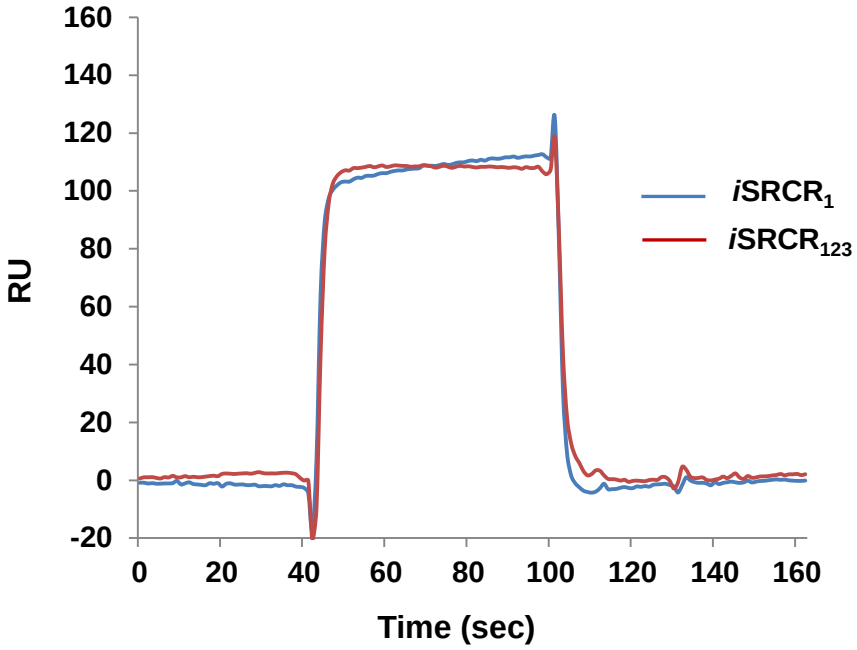

Figure S6. Large changes in RU were observed upon the addition of 2.5 mM $CaCl_2$ to the immobilized *i*$SRCR_1$ and *i*$SRCR_{123}$. Such changes in RU are directly attributable to the SRCR conformational changes. In control experiments, the immobilized $FL^{AgI/II}$ had no changes upon calcium addition (data not shown).

Table S1. Primers used for cloning fragments of SspB of S. gordonii DL1.	
Construct	Primers
FL^{SspB} (NcoI) Forward	5′-TATAACCATGGATGAAGTTACAGAGACAACTAGTACAAG-3′
(39-1433) (NotI) Reverse	5′-TTATAGCGGCCGCAGGATCCTTTGGTTTTGGCGTTGG-3′
$A_3VP_1^{SspB}$ (NcoI) Forward	5′-GCGCCATGGATACCAATGAAGCAGACTACCAA-3′
(386-805) (NotI) Reverse	5′-ATAATTTGCGGCCGCTGGTTTTGATGGCTCCGG-3′
C_{123}^{SspB} (BamHI) Forward	5′-TATAAGGATCCATTTCCACTATAGCAGTTTATTAGC-3′
(913-1406) (XhoI) Reverse	5′-TTATACTCGAGAGATGCATAAGCAACCTTATTAACAG-3′

Table S2. Analytes, Ligand and buffer details of SPR experiments.

Analyte	Ligand			Running Buffer	Regeneration Buffer for Ligands 1 and 2	Regeneration buffer for Ligand 3
	Ligand 1	Ligand 2	Ligand 3			
$FL^{AgI/II}$	*i*$SRCR_1$	*i*$SRCR_{123}$	SAG	20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	1 M NaCl, 20 mM EDTA, pH 7.4	10 mM HCl
$A_3VP_1^{AgI/II}$	*i*$SRCR_1$	*i*$SRCR_{123}$	SAG	20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	1 M NaCl, 20 mM EDTA, pH 7.4	10 mM HCl
$C_{123}^{AgI/II}$	*i*$SRCR_1$	*i*$SRCR_{123}$	SAG	20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	1 M NaCl, 20 mM EDTA, pH 7.4	10 mM HCl
FL^{SspB}	*i*$SRCR_1$	*i*$SRCR_{123}$	SAG	20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	1 M NaCl, 20 mM EDTA pH 7.4	10 mM HCl
$A_3VP_1^{SspB}$	*i*$SRCR_1$	*i*$SRCR_{123}$	SAG	20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	1 M NaCl, 20 mM EDTA, pH 7.4	10 mM HCl
C_{123}^{SspB}	*i*$SRCR_1$	*i*$SRCR_{123}$	SAG	20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	1 M NaCl, 20 mM EDTA, pH 7.4	10 mM HCl
i$SRCR_1$	*i*$SRCR_1$	*i*$SRCR_{123}$		20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	10 mM HCl	
i$SRCR_{123}$	*i*$SRCR_1$	*i*$SRCR_{123}$		20 mM HEPES, pH 7.4, 150 mm NaCl, 2.5 mM $CaCl_2$	10 mM HCl	
2.5 mM $CaCl_2$	*i*$SRCR_1$	*i*$SRCR_{123}$		20 mM HEPES, pH 7.4, 150 mm NaCl	1 M NaCl, 20 mM EDTA, pH 7.4	