

Supplementary table S1: Primers used in RT-qPCR studies.

Gene	Forward primer (5'–3')	Nt position ¹	Reverse primer (5'–3')	Nt position ²
<i>Rv2624</i>	agccgacgatgaaaacaatc	16	atgtgtcggcttgatcactg	150
<i>Rv0382c</i>	cgactgggactattcggttg	176	ccttcgataagtcgctgcat	323
<i>Rv0009</i>	gacatcaagatcgccctgtt	72	atgcgtttgggtcgaatag	172
<i>Rv1144</i>	catcaacctagtcggcacct	323	aggcggtgtaatgatgacg	427
<i>Rv0407</i>	ccgtcgaaaaggtaggtcaa	877	cgactggaagagctccagaa	978
<i>Rv1223</i>	cgatcaaccacggtaactcc	1141	gccaccaatttcatctcgtt	1283
<i>Rv2241</i>	gagcgtggatcagatggaat	241	gtggttgaaaccgacctcat	366

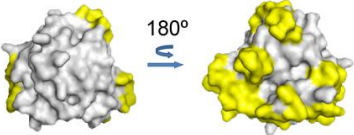
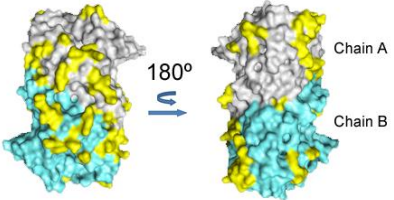
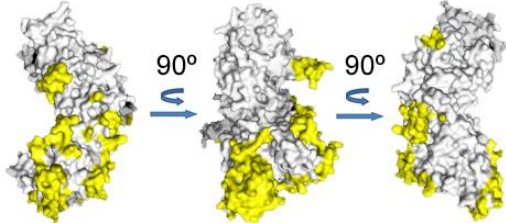
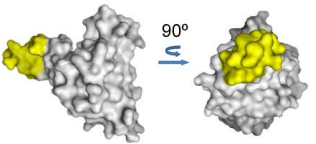
¹ refers to the position in the gene of the 5' base of the forward primer

² refers to the position in the gene of the 5' base of the reverse primer

Supplementary table S2: Primers used to amplify the validated genes.

Gene	Forward primer (5'–3')	Reverse primer (5'–3')
<i>Rv2624c</i>	caccatgtctgggagaggagagcc	tcagcggcgaacgacaagca
<i>Rv0009</i>	caccatggcagactgtgattccgt	tcaggagatggtgatcgact
<i>Rv0407</i>	caccgtggctgaactgaagctagg	tcagccaagtcgccgcaacc
<i>Rv2241</i>	ttaggccccgggaccgggatccgtg	caccgtggcgtcgtattgcccgacattg
<i>Rv1223</i>	caccgtggatactagggtggacac	ctaggtgctatcgggtccg

Supplementary table S3: B-cell epitope prediction

Protein	Crystal Structure	3D Model Template ¹	DP ²	Figure ³	Predicted Epitope density ⁴ (pmol/cm ²)
Rv0009 Iron-regulated peptidyl-prolyl cis-trans isomerase A PpiA	PDB id: 1W74 Chain: A BU: Monomer		38 (171)		35±13
Rv0407 f420-dependent glucose-6-phosphate dehydrogenase	PDB id: 3B4Y Chains: A-B BU: Homodimer		28 (333)		19±7
Rv2241 Pyruvate dehydrogenase E1 component AceE	NA	PDB id: 1L8A Chain: A BU: Homodimer	173 (895)		58±22
Rv2624c Hypothetical stress protein	NA	PDB id: 1MJH Chain: A BU: Homodimer	21 (279)		16±6

¹For those proteins with no published 3D structures (NA), we performed structure homology modeling using the SWISS-MODEL server, an on-line free-access tool (<http://swissmodel.expasy.org/workspace>). The Protein Data Bank identification (PDB id) of template structure used is indicated.

²DiscoTope prediction (DP) were residues with scores >-3,7 determined by DiscoTope 2.0 algorithm. Total # residues on protein 3D structure were indicated between brackets. DiscoTope 2.0 server is a free access prediction tool (<http://www.cbs.dtu.dk/services/DiscoTope-2.0/>).

³Predicted discontinuous B cell epitopes were highlighted in yellow on the published or modeled 3D structures. Molecules were depicted using the PyMOL software.

⁴To estimate the predicted surface density of binding sites per ELISA microplate wells, we considered the following parameters: (1) Number of DiscoTope predicted aminoacidic residues per molecule; (2) Mw of Rv protein+ Mw of GST/HIS-tag; (3) Maximal protein binding capacity of Microplate (Corning High Binding Polystyrene)=500 ng/cm²; (4) Based on published data, one conformational epitope involve between 8-22 aminoacids (95% CI= 8.6-19). The table informed value is Median±Range. Min and Max range values were calculated by considering 19 and 8.6 aminoacids /epitope, respectively.