Table 2 Itentity matrix of SigH

S. pulvereri	*S. vitulinus*	*S. fleurettii*	*S. sciuri*	*S. lentus*	*S. chromogenes*	*S. hyicus*	*S. felis*	*S. delphini*	*S. pseudintermediu*	*S. intermedius*	*S. lutrae*	*S. schleiferi*	*S. muscae*	*S. carnosus*	*S. condimenti*	*S. piscifermentans*	*S. simulans*	*S. capitis*	*S. caprae*	*S. epidermidis*	*S. saccharolyticus*	*S. aureus*	*S. simiae*	*S. pasteuri*	*S. warneri*	*S. lugdunensis*	*S. hominis*	*S. haemolyticus*	*S. equorum*	*S. succinus*	*S. saprophyticus*	*S. xylosus*	*S. cohnii*	*S. nepalensis*	*S. gallinarum*	*S. arlettae*	*S. auricularis*	*S. kloosii*	*B. subtilis*	*L. monocytogenes*	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
***	99.5	76.6	67.6	54.8	26.1	24.8	23.9	23.7	23.3	23.7	22.2	24.1	22.4	28.0	28.9	28.9	28.8	26.4	30.1	28.4	29.4	28.6	33.6	29.7	26.0	26.9	24.2	23.3	28.7	28.4	28.4	31.3	32.4	33.3	29.6	24.0	28.2	28.2	19.0	18.1	**1**
	***	76.6	68.0	54.8	26.1	24.8	23.9	23.7	23.3	23.7	22.2	24.1	22.4	28.0	28.9	28.9	28.8	26.4	30.1	28.4	29.4	28.6	33.6	29.7	26.0	26.9	24.2	23.3	28.7	28.4	28.4	30.9	32.4	33.3	29.6	24.0	28.2	28.2	19.0	18.1	**2**
		***	66.7	52.1	25.2	24.3	23.4	24.2	23.7	24.2	23.6	25.0	24.2	28.4	28.9	27.5	29.2	28.2	30.1	29.3	30.4	29.0	33.6	29.7	27.4	26.0	26.5	23.3	28.7	30.2	28.4	30.0	31.1	31.0	27.8	24.0	28.7	28.6	19.0	17.2	**3**
			***	53.0	26.6	25.2	24.8	25.6	24.7	25.1	25.9	25.5	21.9	26.6	27.5	26.6	28.3	26.9	28.2	28.4	27.6	26.3	30.8	26.0	24.7	25.6	22.4	21.9	26.4	27.4	27.5	29.0	31.1	32.4	28.7	22.2	28.7	26.8	20.8	20.5	**4**
				***	23.7	25.1	21.9	26.0	25.6	25.1	24.1	24.1	22.4	27.1	27.1	25.7	24.2	24.5	26.4	27.9	25.2	27.2	31.3	24.7	22.4	27.4	23.7	22.4	25.9	27.9	28.4	28.6	26.9	27.2	27.3	20.1	25.5	27.9	18.3	16.3	**5**
					***	58.3	41.0	39.5	38.6	39.5	38.0	37.0	35.2	26.6	26.6	26.6	29.2	30.1	30.6	28.8	29.0	28.1	30.4	26.0	25.1	27.4	28.8	29.7	29.2	29.3	29.8	30.0	30.1	33.3	31.0	26.7	29.6	32.3	18.6	16.7	**6**
						***	36.5	40.5	39.5	40.0	37.0	38.0	31.5	28.0	27.5	27.5	31.1	31.0	27.3	30.2	31.3	27.6	29.9	26.9	25.1	28.3	31.5	29.2	30.1	31.2	31.2	33.6	29.7	31.0	30.1	28.5	31.0	30.0	19.0	14.0	**7**
							***	40.0	38.6	39.5	38.4	37.0	32.9	29.8	28.9	29.4	30.6	31.5	28.2	31.2	29.0	28.6	32.2	31.1	30.6	28.3	32.0	33.3	31.0	35.3	32.1	34.1	31.1	31.5	31.5	27.6	29.6	33.6	14.9	18.6	**8**
								***	95.8	92.1	71.2	54.4	44.7	33.5	34.0	34.4	34.0	29.8	29.8	31.6	31.3	29.3	34.6	30.7	30.2	30.7	31.2	31.2	34.4	32.1	34.4	34.0	31.2	32.4	30.7	26.5	30.2	32.6	16.7	17.7	**9**
									***	90.2	70.7	55.3	45.1	32.6	33.5	34.0	33.0	30.2	29.3	32.1	30.4	29.3	34.6	31.2	30.2	31.2	31.6	32.1	34.4	32.1	34.4	33.0	30.2	31.9	29.8	25.6	29.8	33.0	16.7	18.6	**10**
										***	68.8	54.0	44.2	32.1	32.6	32.6	33.0	30.7	28.8	31.6	31.8	29.8	35.0	31.6	30.7	31.2	29.8	30.7	33.5	32.1	34.4	34.0	31.2	32.4	30.2	26.0	30.2	33.0	17.7	17.7	**11**
											***	56.9	44.9	30.6	31.0	32.4	33.8	34.3	32.4	32.1	33.2	30.1	34.6	31.5	34.3	30.1	34.3	34.7	36.1	33.0	32.9	33.3	32.4	31.9	30.1	26.9	31.0	30.1	15.7	16.7	**12**
												***	40.7	31.9	32.9	33.3	31.5	31.0	27.8	30.2	29.0	30.6	31.8	30.1	29.6	29.2	33.8	33.3	32.9	31.6	31.5	33.3	30.6	33.3	31.5	25.9	29.2	30.6	17.6	17.2	**13**
													***	28.4	28.9	28.9	28.3	30.1	27.8	31.2	28.5	28.1	30.8	28.3	30.1	31.1	29.2	31.5	33.8	32.1	33.0	32.3	31.5	31.5	31.9	26.5	31.0	29.2	15.5	15.8	**14**
														***	89.4	74.3	56.4	39.4	35.6	36.7	37.9	37.8	36.0	37.6	35.8	35.8	33.9	31.7	39.8	34.4	36.7	39.2	36.2	38.5	34.7	32.1	36.6	36.7	21.1	22.3	**15**
															***	76.6	57.8	37.0	34.7	38.6	36.9	38.7	36.4	36.2	35.8	33.9	37.2	32.1	40.3	36.7	39.4	39.2	35.3	39.4	35.2	33.0	37.5	37.6	21.6	23.3	**16**
																***	58.3	36.6	32.9	34.4	35.5	36.4	35.5	34.4	34.9	32.6	34.9	32.6	39.4	37.2	36.7	37.3	34.4	37.6	33.8	35.8	38.0	38.1	19.3	21.4	**17**
																	***	34.7	36.1	37.2	34.6	35.5	36.9	32.4	35.6	32.4	35.6	31.1	39.8	39.1	38.1	41.0	37.9	39.0	37.5	36.5	40.7	38.8	18.7	22.3	**18**
																		***	71.8	53.0	57.9	50.9	44.9	45.8	44.4	40.3	40.3	41.2	38.4	40.0	37.0	38.9	35.6	36.6	37.0	31.5	39.8	39.8	17.6	19.1	**19**
																			***	57.7	60.3	50.0	46.3	41.2	42.6	40.3	42.1	40.7	38.9	40.5	35.6	38.4	38.4	39.4	38.9	31.0	41.2	37.5	15.7	17.2	**20**
																				***	60.3	44.7	41.1	42.3	40.0	40.5	41.9	38.1	44.2	39.5	40.5	40.5	39.5	39.9	40.5	36.3	43.7	37.7	18.6	17.7	**21**
																					***	50.0	42.5	43.9	40.7	36.0	44.4	37.9	40.7	38.8	39.3	40.7	38.8	39.0	38.3	34.6	37.9	36.9	17.8	19.6	**22**
																						***	54.7	42.9	39.6	41.5	41.0	39.2	39.8	41.4	37.8	39.2	35.9	39.0	36.6	30.4	37.0	37.8	16.6	18.6	**23**
																							***	40.2	40.2	42.5	43.5	39.3	41.1	43.0	40.7	41.1	40.2	39.4	40.7	33.6	38.3	41.6	17.3	18.2	**24**
																								***	63.9	37.9	35.2	37.0	43.1	42.3	37.6	39.6	37.4	43.2	38.9	32.9	36.1	37.9	18.3	20.5	**25**
																									***	37.9	37.9	38.4	41.2	42.3	40.8	40.6	36.1	38.5	42.1	35.6	37.5	38.8	17.4	20.5	**26**
																										***	37.4	37.4	38.9	38.1	38.1	39.2	33.8	35.7	33.8	31.5	37.5	37.9	15.1	19.1	**27**
																											***	58.0	38.0	39.1	38.1	36.9	36.1	36.6	38.4	34.2	37.5	41.1	16.4	16.3	**28**
																												***	34.3	35.3	33.5	33.6	35.2	36.2	37.0	31.1	35.6	38.4	17.4	18.6	**29**
																													***	60.0	60.6	56.5	53.2	57.7	47.7	41.7	41.7	45.8	17.6	17.7	**30**
																														***	54.4	50.7	48.8	52.6	50.2	41.4	43.7	45.6	19.1	18.6	**31**
																															***	62.7	46.3	52.1	48.1	38.5	42.6	45.4	16.5	16.3	**32**
																																***	48.4	52.1	44.0	37.3	42.6	43.8	15.7	16.7	**33**
																																	***	69.5	46.8	37.0	38.9	37.4	16.9	19.5	**34**
																																		***	47.9	39.9	41.3	42.3	16.9	17.4	**35**
																																			***	39.8	42.6	39.4	18.5	15.8	**36**
																																				***	38.0	38.6	13.1	14.0	**37**
																																					***	42.6	17.6	17.2	**38**
																																						***	18.2	23.3	**39**
																																							***	44.2	**40**
																																								***	**41**