



## Summary Report

Seq. Id	Non-Homologous	Localization	Essential	Virulent	Helices < 2	Annotated
1	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	16	0	OUT: 0	
2	✗	✗	✗	✗	✓	✓
	1	Cytoplasmic	0	0	OUT: 0	
3	✓	✓	✓	✓	✓	?
	0	OuterMembrane	1	3	OUT: 0	
4	✓	✓	✗	✓	✓	✗
	0	OuterMembrane	0	15	OUT: 0	
5	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	IN: 8	
6	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	IN: 2	
7	✗	✗	✓	✓	✗	?
	2	CytoplasmicMembrane	3	1	IN: 6	
8	•	✗	✗	•	•	•

	0	Cytoplasmic	0	11	OUT: 0	
9	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	1	6	OUT: 0	
10	✓	✓	✗	✓	✓	✓
	0	OuterMembrane	0	48	IN: 1	
11	✓	✗	✗	✓	✓	✓
	0	Unknown	0	4	OUT: 0	
12	✗	✗	✓	✗	✓	✓
	4	Cytoplasmic	3	0	OUT: 0	
13	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
14	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
15	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	23	0	OUT: 0	
17	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
16	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
19	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	1	0	IN: 0	
18	✓	✗	✗	✓	✓	✗
	0	Cytoplasmic	0	3	IN: 1	
21	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
20	✓	✗	✗	✗	✗	?
	0	Cytoplasmic	0	0	IN: 3	
23	✓	✗	✗	✗	✓	✗
	0	CytoplasmicMem brane	0	0	OUT: 1	
22	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMem brane	0	3	OUT: 13	
25	✗	✗	✓	✗	✓	✓
	10	Cytoplasmic	4	0	OUT: 0	
24	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 0	
27	✓	✗	✗	✗	✗	✗
	0	Cytoplasmic	0	0	OUT: 2	
26	✓	✗	✓	✗	✓	✓
	0	Unknown	4	0	OUT: 0	

29						
	0	Unknown	0	0	OUT: 0	
28						
	0	Unknown	0	0	IN: 1	
31						
	0	Cytoplasmic	0	0	IN: 1	
30						
	0	Unknown	1	0	IN: 1	
34						
	0	Unknown	0	0	IN: 0	
35						
	0	Unknown	1	0	OUT: 2	
32						
	0	Unknown	1	0	OUT: 0	
33						
	0	Cytoplasmic	0	0	IN: 1	
38						
	9	Periplasmic	1	0	OUT: 2	
39						
	0	CytoplasmicMem brane	0	0	IN: 4	

36						
	0	Unknown	1	0	OUT: 0	
37						
	0	CytoplasmicMembrane	1	0	OUT: 5	
42						
	0	Unknown	0	0	OUT: 0	
43						
	0	Unknown	1	0	IN: 1	
40						
	0	Unknown	0	0	OUT: 1	
41						
	0	Cytoplasmic	0	0	OUT: 0	
46						
	0	Cytoplasmic	0	3	IN: 1	
47						
	0	Unknown	0	0	OUT: 1	
44						
	0	OuterMembrane	0	4	OUT: 0	
45						
	0	CytoplasmicMem	1	0	OUT: 15	

		brane				
51	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	17	0	IN: 0	
50	✓	✗	✗	✗	✗	✓
	0	Cytoplasmic	0	0	OUT: 2	
49	✓	✗	✗	✗	✓	✓
	0	CytoplasmicMem brane	0	0	IN: 1	
48	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
55	✓	✗	✗	✗	✗	✗
	0	Unknown	0	0	IN: 3	
54	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMem brane	1	1	OUT: 13	
53	✓	✓	✗	✗	✓	?
	0	OuterMembrane	0	0	OUT: 0	
52	✓	✗	✗	✓	✗	✓
	0	Cytoplasmic	0	3	OUT: 2	
59	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	

58						
	0	Unknown	1	0	OUT: 0	
57						
	0	Cytoplasmic	3	0	OUT: 1	
56						
	0	Cytoplasmic	0	0	OUT: 0	
63						
	0	Cytoplasmic	1	0	OUT: 0	
62						
	0	Cytoplasmic	1	0	IN: 1	
61						
	4	Periplasmic	1	4	OUT: 0	
60						
	16	Cytoplasmic	3	0	OUT: 0	
68						
	0	Cytoplasmic	0	0	OUT: 0	
69						
	0	Cytoplasmic	0	0	OUT: 0	
70						
	0	Cytoplasmic	0	0	OUT: 0	

71						
	0	Cytoplasmic	0	3	OUT: 1	
64						
	0	Cytoplasmic	1	0	OUT: 0	
65						
	0	CytoplasmicMembrane	5	0	OUT: 4	
66						
	0	Cytoplasmic	2	0	IN: 0	
67						
	0	Cytoplasmic	0	0	IN: 1	
76						
	0	Unknown	1	0	OUT: 0	
77						
	0	CytoplasmicMembrane	0	0	OUT: 1	
78						
	0	Unknown	0	0	OUT: 0	
79						
	0	CytoplasmicMembrane	0	0	IN: 1	
	*	*	*	*	*	*

72	0	Cytoplasmic	3	3	OUT: 0	
73	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
74	✓	✓	✗	✓	✗	✗
	0	Extracellular	0	15	OUT: 2	
75	✓	✓	✗	✓	✓	?
	0	Extracellular	0	7	OUT: 0	
85	✓	✓	✗	✓	✓	✓
	0	OuterMembrane	0	4	IN: 1	
84	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	1	2	OUT: 0	
87	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
86	✓	✓	✗	✗	✓	✓
	0	Extracellular	0	0	OUT: 0	
81	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMem brane	0	3	OUT: 11	
80	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
83	✗	✗	✗	✗	✓	✓

	0	Cytoplasmic	0	0	OUT: 0	
82	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 1	
93	✓	✗	✗	✓	✓	✗
	0	Cytoplasmic	0	3	OUT: 0	
92	✓	✗	✗	✗	✓	✓
	0	Periplasmic	0	0	IN: 1	
95	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
94	✓	✗	✗	✓	✓	✓
	0	Unknown	0	1	IN: 1	
89	✓	✗	✓	✗	✗	✗
	0	Unknown	1	0	OUT: 4	
88	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
91	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	4	IN: 0	
90	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 0	
102	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	2	0	IN: 1	
103	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
100	✓	✗	✗	✓	✓	✗
	0	Unknown	0	8	IN: 1	
101	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	6	0	OUT: 0	
98	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
99	✗	✗	✓	✓	✓	✓
	1	Cytoplasmic	29	3	OUT: 0	
96	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
97	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	11	0	OUT: 0	
110	✓	✗	✗	✗	✗	✓
	0	Unknown	0	0	OUT: 2	
111	✓	✗	✗	✗	✗	✓
	0	Unknown	0	0	OUT: 2	
108	✓	✗	✗	✗	✓	?

	0	Unknown	0	0	OUT: 0	
109	✗	✗	✓	✗	✗	✓
	6	Cytoplasmic	16	0	OUT: 2	
106	✓	✗	✓	✗	✗	✗
	0	Unknown	1	0	IN: 5	
107	✗	✗	✓	✓	✓	✓
	3	Cytoplasmic	2	3	OUT: 0	
104	✓	✗	✗	✗	✗	?
	0	Cytoplasmic	0	0	OUT: 2	
105	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	8	0	OUT: 0	
119	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
118	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
117	✓	✗	✓	✗	✓	✓
	0	CytoplasmicMembrane	1	0	OUT: 0	
116	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
115	✗	✗	✗	✗	✓	?

	0	Cytoplasmic	0	0	OUT: 1	
114	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
113	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMembrane	1	1	OUT: 1	
112	✓	✓	✗	✗	✓	✓
	0	Extracellular	0	0	IN: 1	
127	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 1	
126	✗	✗	✓	✓	✓	✓
	5	Cytoplasmic	24	3	OUT: 0	
125	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	12	6	IN: 5	
124	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
123	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	16	0	IN: 1	
122	✓	✗	✗	✗	✗	✗
	0	Cytoplasmic	0	0	OUT: 3	

121							
	0	CytoplasmicMem brane	0	0	IN: 9		
120							
	0	CytoplasmicMem brane	0	0	IN: 1		
137							
	0	Unknown	0	2	OUT: 0		
136							
	0	CytoplasmicMem brane	0	2	OUT: 1		
139							
	0	Cytoplasmic	2	0	OUT: 0		
138							
	0	Cytoplasmic	1	0	OUT: 0		
141							
	0	CytoplasmicMem brane	0	4	OUT: 2		
140							
	0	Unknown	0	0	OUT: 0		
143							
	0	CytoplasmicMem	0	0	IN: 6		

		brane				
142	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
129	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
128	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 0	
131	✓	✗	✗	✗	✓	?
	0	CytoplasmicMem brane	0	0	OUT: 0	
130	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
133	✓	✓	✗	✓	✓	✗
	0	OuterMembrane	0	15	OUT: 0	
132	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 1	
135	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
134	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMem brane	2	0	IN: 7	

152						
	0	Unknown	1	0	OUT: 0	
153						
	0	CytoplasmicMembrane	0	0	IN: 12	
154						
	9	Cytoplasmic	7	0	OUT: 0	
155						
	0	Cytoplasmic	1	0	OUT: 0	
156						
	0	Unknown	0	0	IN: 3	
157						
	0	Unknown	0	0	IN: 1	
158						
	0	Unknown	0	0	OUT: 4	
159						
	0	Unknown	0	0	IN: 0	
144						
	0	Cytoplasmic	1	0	OUT: 0	
145						
	0	Unknown	0	0	IN: 1	

146						
	0	Cytoplasmic	0	0	OUT: 0	
147						
	0	Cytoplasmic	2	0	OUT: 0	
148						
	0	Cytoplasmic	0	4	OUT: 0	
149						
	0	Cytoplasmic	0	0	OUT: 0	
150						
	0	Unknown	0	0	OUT: 0	
151						
	0	Cytoplasmic	0	0	OUT: 0	
171						
	0	Cytoplasmic	0	0	OUT: 0	
170						
	0	Unknown	0	0	OUT: 0	
169						
	0	Cytoplasmic	0	0	OUT: 0	
168						
	9	Cytoplasmic	3	0	IN: 2	

175						
	0	Cytoplasmic	5	0	OUT: 0	
174						
	0	Unknown	0	0	OUT: 0	
173						
	0	CytoplasmicMembrane	1	0	OUT: 0	
172						
	0	CytoplasmicMembrane	0	0	OUT: 5	
163						
	0	Cytoplasmic	0	0	OUT: 0	
162						
	0	Cytoplasmic	0	0	OUT: 0	
161						
	0	CytoplasmicMembrane	0	66	IN: 2	
160						
	0	Cytoplasmic	1	0	IN: 1	
167						
	0	OuterMembrane	0	3	OUT: 0	
	.	.	.	.	.	.

166	0	Unknown	0	0	IN: 1	
165	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	IN: 1	
164	✗	✗	✗	✓	✓	✓
	1	Cytoplasmic	0	50	OUT: 1	
186	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	3	0	OUT: 0	
187	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
184	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	OUT: 0	
185	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
190	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	2	1	OUT: 3	
191	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
188	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 0	
189	✓	✗	✓	✗	✓	✗

	0	Unknown	1	0	IN: 1	
178	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
179	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 1	
176	✓	✗	✓	✗	✓	✓
	0	CytoplasmicMem brane	2	0	OUT: 0	
177	✓	✗	✗	✗	✓	✗
	0	CytoplasmicMem brane	0	0	IN: 1	
182	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	4	0	OUT: 0	
183	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
180	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMem brane	0	3	IN: 12	
181	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
205	✓	✗	✗	✗	✓	✓

	0	Cytoplasmic	0	0	OUT: 0	
204	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
207	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 1	
206	✓	✗	✓	✗	✗	?
	0	CytoplasmicMem brane	6	0	OUT: 14	
201	✗	✗	✓	✗	✗	✓
	1	CytoplasmicMem brane	1	0	IN: 13	
200	✓	✗	✗	✗	✓	✓
	0	CytoplasmicMem brane	0	0	IN: 1	
203	✓	✗	✓	✗	✗	?
	0	CytoplasmicMem brane	1	0	IN: 13	
202	✓	✓	✗	✗	✓	?
	0	Extracellular	0	0	OUT: 0	
197	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 1	
196	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	1	0	OUT: 0	
199	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
198	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
193	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
192	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	43	0	OUT: 0	
195	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	IN: 6	
194	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
220	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
221	✓	✗	✓	✗	✗	✗
	0	CytoplasmicMembrane	1	0	IN: 4	
222	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem	0	0	IN: 5	

		brane				
223	✓	✗	✓	✗	✓	✓
	0	Unknown	2	0	OUT: 0	
216	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	49	0	OUT: 0	
217	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	7	0	OUT: 1	
218	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
219	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	21	0	OUT: 0	
212	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 2	
213	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	28	1	OUT: 1	
214	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMembrane	13	3	OUT: 0	
215	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	3	0	OUT: 0	

208						
	0	CytoplasmicMembrane	24	43	IN: 10	
209						
	0	Cytoplasmic	1	0	OUT: 0	
210						
	0	CytoplasmicMembrane	0	0	OUT: 1	
211						
	0	Unknown	0	0	OUT: 0	
239						
	0	Cytoplasmic	0	0	OUT: 0	
238						
	12	Cytoplasmic	6	0	OUT: 2	
237						
	0	Unknown	0	0	OUT: 0	
236						
	0	Unknown	0	0	IN: 1	
235						
	0	Periplasmic	0	18	IN: 1	
234						

	0	Unknown	0	0	OUT: 0	
233	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
232	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
231	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMem brane	28	5	OUT: 2	
230	✓	✗	✗	✗	✗	✓
	0	Unknown	0	0	OUT: 2	
229	✓	✗	✗	✗	✗	✗
	0	Unknown	0	0	IN: 3	
228	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
227	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 1	
226	✗	✗	✓	✗	✓	✓
	14	Cytoplasmic	23	0	OUT: 0	
225	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
224	✗	✗	✗	✓	✗	?

	0	CytoplasmicMembrane	0	3	OUT: 2	
254	✓	✓	✗	✗	✓	?
	0	OuterMembrane	0	0	OUT: 0	
255	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
252	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
253	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
250	✓	✗	✗	✗	✗	✓
	0	Unknown	0	0	OUT: 3	
251	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
248	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 1	
249	✓	✗	✗	✓	✗	?
	0	Unknown	0	2	IN: 3	
246	✗	✗	✓	✗	✓	✓
	27	Cytoplasmic	6	0	OUT: 1	
247	✓	✗	✗	✗	✓	?

	0	Cytoplasmic	0	0	OUT: 0	
244	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
245	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
242	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
243	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
240	✓	✗	✓	✗	✗	✗
	0	CytoplasmicMembrane	1	0	OUT: 4	
241	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
275	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
274	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
273	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
272	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	15	0	OUT: 0	
279	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
278	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 1	
277	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
276	✓	✗	✓	✗	✓	✓
	0	Unknown	7	0	OUT: 0	
283	✗	✗	✓	✗	✓	✓
	8	Cytoplasmic	7	0	OUT: 0	
282	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	15	0	OUT: 2	
281	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 7	
280	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
287	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMembrane	0	3	IN: 12	

286						
	0	Unknown	1	0	OUT: 0	
285						
	0	Extracellular	1	69	OUT: 0	
284						
	0	Unknown	1	0	OUT: 1	
258						
	0	CytoplasmicMembrane	1	0	IN: 1	
259						
	34	Cytoplasmic	0	0	OUT: 0	
256						
	0	Cytoplasmic	0	0	OUT: 0	
257						
	0	Unknown	0	0	OUT: 0	
262						
	0	CytoplasmicMembrane	0	0	OUT: 12	
263						
	0	Cytoplasmic	0	0	IN: 0	
260						

	0	Cytoplasmic	0	0	OUT: 0	
261	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	6	8	IN: 1	
266	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	3	IN: 1	
267	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
264	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMem brane	0	0	IN: 3	
265	✓	✓	✗	✓	✓	?
	0	OuterMembrane	0	15	OUT: 0	
270	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
271	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	12	3	OUT: 0	
268	✗	✗	✓	✗	✓	✓
	13	Cytoplasmic	21	0	OUT: 0	
269	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	13	1	OUT: 0	
305	✓	✗	✗	✗	✗	?

	0	CytoplasmicMembrane	0	0	IN: 4	
304	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	4	IN: 0	
307	✓	✗	✗	✗	✓	✓
	0	Periplasmic	0	0	IN: 1	
306	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
309	✓	✗	✓	✗	✓	✓
	0	CytoplasmicMembrane	3	0	OUT: 0	
308	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 0	
311	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
310	✗	✗	✓	✗	✓	✓
	5	Cytoplasmic	7	0	OUT: 0	
313	✗	✗	✓	✗	✓	✓
	10	Cytoplasmic	22	0	OUT: 0	
312	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	21	0	OUT: 3	

315						
	0	Cytoplasmic	0	0	OUT: 0	
314						
	0	Cytoplasmic	0	0	OUT: 0	
317						
	0	Unknown	1	0	IN: 1	
316						
	0	CytoplasmicMembrane	0	0	IN: 4	
319						
	0	Cytoplasmic	0	6	OUT: 0	
318						
	0	Cytoplasmic	1	0	OUT: 0	
288						
	0	Cytoplasmic	0	0	OUT: 0	
289						
	0	CytoplasmicMembrane	3	0	IN: 10	
290						
	0	Cytoplasmic	0	0	OUT: 0	
291						

	0	Unknown	1	0	OUT: 1	
292	✓	✗	✗	✓	✗	?
	0	Unknown	0	3	OUT: 3	
293	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
294	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
295	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMem brane	1	0	OUT: 11	
296	✓	✗	✗	✗	✗	?
	0	Unknown	0	0	OUT: 2	
297	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
298	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	18	OUT: 0	
299	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 7	
300	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 1	

301						
	0	Unknown	0	0	OUT: 0	
302						
	0	Cytoplasmic	1	0	OUT: 0	
303						
	0	Cytoplasmic	26	0	IN: 0	
343						
	0	Unknown	0	0	OUT: 0	
342						
	0	Unknown	0	0	OUT: 0	
341						
	0	Cytoplasmic	1	0	OUT: 0	
340						
	0	Cytoplasmic	3	0	OUT: 0	
339						
	0	Cytoplasmic	25	0	OUT: 0	
338						
	0	CytoplasmicMembrane	0	0	OUT: 0	
337						
	0	CytoplasmicMem	0	0	IN: 1	

		brane				
336	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
351	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
350	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
349	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMem brane	1	0	IN: 12	
348	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 1	
347	✓	✗	✗	✗	✓	✓
	0	Periplasmic	0	0	IN: 1	
346	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	6	155	IN: 0	
345	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 4	
344	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	17	0	OUT: 0	

326						
	0	Unknown	0	0	IN: 5	
327						
	0	Cytoplasmic	27	0	OUT: 0	
324						
	0	Cytoplasmic	0	0	OUT: 0	
325						
	0	Cytoplasmic	1	0	OUT: 0	
322						
	0	Cytoplasmic	0	0	OUT: 1	
323						
	0	Unknown	0	0	IN: 1	
320						
	0	Cytoplasmic	0	16	OUT: 0	
321						
	0	CytoplasmicMembrane	0	0	OUT: 13	
334						
	0	Unknown	0	0	OUT: 0	
335						
	0	Cytoplasmic	13	3	OUT: 0	

332						
	0	Cytoplasmic	16	1	IN: 0	
333						
	10	Cytoplasmic	18	0	OUT: 0	
330						
	0	Unknown	0	0	OUT: 0	
331						
	0	Extracellular	0	0	OUT: 0	
328						
	0	Cytoplasmic	0	0	OUT: 0	
329						
	0	Cytoplasmic	0	0	OUT: 0	
373						
	0	Cytoplasmic	3	0	IN: 0	
372						
	0	Unknown	0	0	OUT: 0	
375						
	0	Cytoplasmic	27	0	IN: 2	
374						
	0	Cytoplasmic	9	0	OUT: 0	

369						
	0	Cytoplasmic	1	1	IN: 1	
368						
	0	Cytoplasmic	0	0	OUT: 0	
371						
	0	Unknown	0	0	OUT: 0	
370						
	0	Cytoplasmic	1	0	OUT: 0	
381						
	0	Unknown	1	6	IN: 0	
380						
	0	CytoplasmicMem brane	0	0	OUT: 0	
383						
	0	CytoplasmicMem brane	1	2	OUT: 7	
382						
	5	Cytoplasmic	4	0	OUT: 0	
377						
	0	Unknown	0	0	IN: 1	
376						

	0	Cytoplasmic	1	0	IN: 0	
379	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMem brane	1	0	IN: 5	
378	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	2	102	OUT: 0	
356	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	9	OUT: 0	
357	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
358	✓	✗	✗	✓	✓	?
	0	Unknown	0	15	OUT: 0	
359	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
352	✓	✗	✓	✗	✓	✗
	0	CytoplasmicMem brane	1	0	OUT: 1	
353	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMem brane	2	1	OUT: 0	
354	✓	✗	✗	✗	✗	✗

	0	Unknown	0	0	IN: 5	
355	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	8	0	OUT: 0	
364	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 1	
365	✓	✗	✓	✗	✗	?
	0	Cytoplasmic	1	0	OUT: 2	
366	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
367	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	17	0	OUT: 0	
360	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
361	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
362	✗	✗	✓	✗	✓	✓
	11	Cytoplasmic	34	0	OUT: 0	
363	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
410	✗	✗	✓	✗	✗	✓

	171	CytoplasmicMembrane	22	0	IN: 3	
411	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 1	
408	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
409	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
414	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
415	✓	✗	✗	✓	✗	?
	0	CytoplasmicMembrane	0	5	IN: 2	
412	✗	✗	✓	✗	✓	✓
	23	Cytoplasmic	25	0	OUT: 0	
413	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
402	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
403	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem	0	0	OUT: 7	

		brane				
400	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	12	4	OUT: 0	
401	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
406	✓	✗	✗	✗	✓	?
	0	CytoplasmicMem brane	0	0	OUT: 0	
407	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
404	✓	✗	✗	✗	✗	✓
	0	Unknown	0	0	OUT: 2	
405	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 0	
395	✓	✗	✗	✗	✗	✓
	0	Periplasmic	0	0	OUT: 2	
394	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
393	✓	✗	✗	✓	✓	✓
	0	Unknown	0	1	OUT: 0	
392	✓	✗	✗	✗	✗	?

	0	Cytoplasmic	0	0	OUT: 2	
399	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
398	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
397	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
396	✓	✓	✓	✗	✓	?
	0	OuterMembrane	1	0	IN: 1	
387	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
386	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
385	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 13	
384	✗	✗	✓	✗	✓	✓
	11	Cytoplasmic	1	0	OUT: 0	
391	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	2	1	IN: 5	

390						
	0	Cytoplasmic	0	0	OUT: 0	
389						
	0	CytoplasmicMembrane	0	0	IN: 2	
388						
	0	Cytoplasmic	1	0	OUT: 2	
440						
	0	Unknown	0	3	IN: 1	
441						
	14	CytoplasmicMembrane	1	0	IN: 13	
442						
	0	Cytoplasmic	0	0	OUT: 0	
443						
	0	Cytoplasmic	28	81	OUT: 0	
444						
	1	Cytoplasmic	26	0	OUT: 0	
445						
	0	CytoplasmicMembrane	0	0	OUT: 11	
	.	.	.	.	.	.

446	0	Cytoplasmic	0	0	IN: 1	
447	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	6	0	OUT: 0	
432	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 1	
433	✗	✗	✓	✗	✓	✓
	4	Cytoplasmic	2	0	OUT: 0	
434	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
435	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
436	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
437	✗	✗	✓	✗	✗	✓
	250	CytoplasmicMembrane	7	0	OUT: 18	
438	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	5	0	OUT: 0	
439	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
425	✓	✗	✓	✓	✓	✓

	0	Cytoplasmic	17	24	OUT: 0	
424	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
427	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 0	
426	✓	✓	✗	✓	✓	✓
	0	Extracellular	0	4	OUT: 0	
429	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
428	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 0	
431	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
430	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
417	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
416	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
419	✓	✓	✓	✗	✓	?

	0	OuterMembrane	1	0	OUT: 0	
418	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 0	
421	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 0	
420	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
423	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
422	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	4	0	OUT: 0	
478	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMem brane	0	0	IN: 2	
479	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
476	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
477	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 1	
474	✓	✗	✓	✗	✓	?

	0	Cytoplasmic	2	0	OUT: 0	
475	✓	✗	✗	✗	✓	?
	0	CytoplasmicMembrane	0	0	IN: 1	
472	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	OUT: 14	
473	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	3	OUT: 0	
470	✓	✗	✓	✗	✗	✓
	0	Unknown	1	0	IN: 3	
471	✓	✗	✗	✗	✗	✗
	0	Cytoplasmic	0	0	OUT: 2	
468	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 1	
469	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 1	
466	✓	✓	✗	✗	✓	?
	0	OuterMembrane	0	0	OUT: 0	
467	✓	✗	✗	✗	✗	?
	0	Unknown	0	0	IN: 3	

464						
	0	CytoplasmicMembrane	0	0	IN: 6	
465						
	0	CytoplasmicMembrane	0	3	IN: 3	
463						
	0	Cytoplasmic	2	0	OUT: 0	
462						
	0	Unknown	0	0	OUT: 0	
461						
	0	CytoplasmicMembrane	1	0	IN: 1	
460						
	0	Unknown	0	0	IN: 3	
459						
	0	CytoplasmicMembrane	20	0	OUT: 10	
458						
	0	Cytoplasmic	24	0	IN: 0	
457						
	0	Unknown	0	0	IN: 1	

456						
	0	Unknown	0	0	OUT: 0	
455						
	16	Cytoplasmic	23	2	IN: 1	
454						
	30	CytoplasmicMembrane	4	0	OUT: 0	
453						
	126	Cytoplasmic	11	1	OUT: 0	
452						
	7	Cytoplasmic	3	0	IN: 1	
451						
	0	Cytoplasmic	0	0	OUT: 0	
450						
	0	Cytoplasmic	0	0	OUT: 0	
449						
	6	Cytoplasmic	24	0	OUT: 0	
448						
	0	Unknown	0	0	OUT: 0	
508						
	0	CytoplasmicMem	14	9	OUT: 0	

		brane				
509	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	IN: 1	
510	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 7	
511	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
504	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	1	1	OUT: 0	
505	✗	✗	✓	✓	✗	✓
	69	CytoplasmicMem brane	10	33	IN: 5	
506	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 1	
507	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	4	IN: 1	
500	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
501	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 1	

502							
	0	CytoplasmicMembrane	1	0	IN: 6		
503							
	0	Cytoplasmic	0	0	OUT: 0		
496							
	0	Cytoplasmic	5	3	OUT: 0		
497							
	0	Unknown	0	0	OUT: 0		
498							
	0	Cytoplasmic	1	1	OUT: 0		
499							
	0	CytoplasmicMembrane	22	13	OUT: 0		
493							
	0	Unknown	1	0	IN: 1		
492							
	0	Cytoplasmic	1	0	IN: 0		
495							
	2	Cytoplasmic	4	0	OUT: 0		
494							

	0	Unknown	0	0	IN: 1	
489	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	6	6	OUT: 0	
488	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
491	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 0	
490	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
485	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
484	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 0	
487	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	12	0	OUT: 2	
486	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	4	OUT: 0	
481	✓	✗	✗	✓	✓	✓
	0	Unknown	0	1	OUT: 0	
480	✓	✗	✓	✗	✓	✗

	0	Unknown	1	0	OUT: 0	
483	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	19	0	OUT: 3	
482	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 7	
550	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
551	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
548	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	IN: 10	
549	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	25	0	IN: 0	
546	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
547	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	4	21	IN: 6	
544	✓	✗	✗	✗	✗	?

	0	CytoplasmicMembrane	0	0	IN: 5	
545	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 1	
558	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	4	0	OUT: 0	
559	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
556	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	OUT: 2	
557	✓	✗	✗	✗	✗	✓
	0	Unknown	0	0	OUT: 3	
554	✗	✗	✓	✗	✗	✓
	250	CytoplasmicMembrane	5	0	OUT: 8	
555	✗	✗	✓	✗	✓	✓
	13	Cytoplasmic	2	0	OUT: 0	
552	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
553	✓	✗	✓	✓	✓	✓

	0	Unknown	1	1	OUT: 0	
567	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 1	
566	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	IN: 12	
565	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
564	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
563	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
562	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	1	16	OUT: 11	
561	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
560	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 0	
575	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 1	

574						
	0	CytoplasmicMembrane	1	0	IN: 14	
573						
	0	OuterMembrane	0	15	OUT: 0	
572						
	0	CytoplasmicMembrane	12	0	IN: 12	
571						
	0	Cytoplasmic	2	0	OUT: 0	
570						
	0	Unknown	0	0	IN: 1	
569						
	0	CytoplasmicMembrane	0	0	OUT: 4	
568						
	0	Unknown	0	0	OUT: 0	
516						
	0	Periplasmic	0	0	IN: 2	
517						
	0	Cytoplasmic	0	0	OUT: 0	
	.	.	.	.	.	.

518	0	Cytoplasmic	26	0	OUT: 0	
519	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
512	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
513	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 0	
514	✗	✗	✓	✓	✓	✓
	9	Periplasmic	4	8	OUT: 0	
515	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
524	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
525	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
526	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	2	OUT: 0	
527	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMembrane	17	55	OUT: 0	
520	✓	✗	✓	✗	✗	✓

	0	CytoplasmicMembrane	1	0	IN: 5	
521	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 6	
522	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
523	✗	✗	✓	✗	✗	✓
	6	CytoplasmicMembrane	2	0	OUT: 12	
533	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	1	14	OUT: 0	
532	✓	✗	✗	✗	✓	✗
	0	CytoplasmicMembrane	0	0	IN: 1	
535	✓	✓	✗	✗	✗	✗
	0	OuterMembrane	0	0	IN: 3	
534	✓	✓	✓	✓	✓	✓
	0	Extracellular	2	3	IN: 1	
529	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
528	✓	✗	✗	✗	✗	?

	0	Unknown	0	0	IN: 2	
531	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
530	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
541	✗	✗	✓	✗	✗	✓
	5	Cytoplasmic	8	0	OUT: 2	
540	✓	✗	✗	✗	✗	✓
	0	Cytoplasmic	0	0	OUT: 2	
543	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	12	0	OUT: 0	
542	✓	✗	✗	✓	✓	?
	0	Unknown	0	3	IN: 1	
537	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
536	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 3	
539	✗	✗	✓	✗	✗	✓
	250	CytoplasmicMembrane	1	0	OUT: 9	

538						
	0	CytoplasmicMembrane	0	0	IN: 2	
610						
	0	Cytoplasmic	1	0	IN: 0	
611						
	0	Cytoplasmic	14	2	IN: 0	
608						
	0	Unknown	1	0	IN: 1	
609						
	0	Cytoplasmic	0	1	OUT: 0	
614						
	0	Unknown	0	0	IN: 1	
615						
	0	CytoplasmicMembrane	1	0	OUT: 0	
612						
	0	Unknown	0	0	IN: 0	
613						
	0	Cytoplasmic	0	0	OUT: 0	
618						

	0	Cytoplasmic	7	4	OUT: 0	
619	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
616	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 12	
617	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
622	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	2	OUT: 0	
623	✓	✗	✓	✗	✓	✓
	0	CytoplasmicMembrane	14	0	OUT: 0	
620	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
621	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	IN: 5	
627	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	IN: 5	
626	✓	✗	✓	✗	✓	✓

	0	CytoplasmicMembrane	2	0	OUT: 0	
625	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
624	✗	✗	✓	✗	✓	✓
	7	Cytoplasmic	12	0	OUT: 0	
631	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
630	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
629	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	IN: 2	
628	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
635	✓	✓	✓	✗	✓	✓
	0	OuterMembrane	1	0	OUT: 0	
634	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 0	
633	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem	0	0	OUT: 3	

		brane				
632	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
639	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
638	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
637	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
636	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 1	
576	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
577	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
578	✓	✗	✗	✓	✓	✗
	0	Unknown	0	3	IN: 1	
579	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
580	✓	✗	✗	✗	✗	✓

	0	CytoplasmicMembrane	0	0	IN: 10	
581	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
582	✓	✓	✗	✓	✓	✗
	0	Extracellular	0	14	IN: 1	
583	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
584	✓	✗	✗	✓	✓	?
	0	Periplasmic	0	3	OUT: 0	
585	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
586	✓	✗	✓	✗	✓	?
	0	Unknown	2	0	OUT: 1	
587	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 0	
588	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
589	✗	✗	✓	✓	✓	✓
	10	Cytoplasmic	23	1	OUT: 0	
590	✓	✗	✗	✗	✗	✗

	0	CytoplasmicMembrane	0	0	OUT: 4	
591	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
593	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	OUT: 0	
592	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	24	0	OUT: 0	
595	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	IN: 1	
594	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 0	
597	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
596	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 0	
599	✓	✗	✓	✓	✓	✓
	0	Unknown	96	8	OUT: 0	
598	✗	✗	✓	✓	✓	✓
	37	Cytoplasmic	1	3	OUT: 1	
601	✓	✗	✗	✗	✓	✓

	0	Unknown	0	0	OUT: 0	
600	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
603	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
602	✓	✓	✗	✓	✓	✓
	0	Extracellular	0	2	IN: 1	
605	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 0	
604	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
607	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 0	
606	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	IN: 0	
687	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
686	✓	✗	✓	✗	✗	?
	0	CytoplasmicMembrane	1	0	IN: 2	
685	*	*	*	*	*	*

	7	Cytoplasmic	26	0	OUT: 0	
684	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
683	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
682	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
681	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
680	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
679	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
678	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	12	0	IN: 0	
677	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	4	0	OUT: 2	
676	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
675	✓	✗	✗	✗	✓	✓

	0	Cytoplasmic	0	0	OUT: 1	
674	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	4	0	OUT: 0	
673	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	3	OUT: 0	
672	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	OUT: 6	
702	✓	✗	✗	✓	✓	✗
	0	Unknown	0	3	OUT: 1	
703	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem brane	0	0	IN: 11	
700	✓	✗	✗	✓	✗	✗
	0	CytoplasmicMem brane	0	3	IN: 2	
701	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	OUT: 0	
698	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
699	✓	✗	✗	✗	✓	✓

	0	Cytoplasmic	0	0	OUT: 0	
696	✗	✗	✓	✗	✓	✓
	2	Cytoplasmic	5	0	IN: 1	
697	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMembrane	0	18	IN: 7	
694	✓	✓	✗	✓	✓	✓
	0	Extracellular	0	14	OUT: 0	
695	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
692	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	3	11	IN: 0	
693	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
690	✓	✓	✗	✗	✓	✓
	0	OuterMembrane	0	0	OUT: 0	
691	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
688	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMembrane	44	48	OUT: 0	

689						
	0	Unknown	0	0	OUT: 0	
653						
	0	Cytoplasmic	1	0	OUT: 0	
652						
	8	Cytoplasmic	18	0	OUT: 0	
655						
	0	Unknown	0	0	OUT: 0	
654						
	0	Cytoplasmic	2	0	IN: 0	
649						
	0	CytoplasmicMem brane	0	1	IN: 0	
648						
	0	Cytoplasmic	0	0	IN: 1	
651						
	18	Cytoplasmic	23	3	IN: 0	
650						
	0	OuterMembrane	0	1	OUT: 0	
645						
	0	Cytoplasmic	1	0	OUT: 1	

644						
	0	Cytoplasmic	0	0	IN: 0	
647						
	0	Unknown	0	0	IN: 1	
646						
	0	Cytoplasmic	0	0	OUT: 0	
641						
	0	CytoplasmicMembrane	0	0	OUT: 0	
640						
	0	Cytoplasmic	18	0	OUT: 0	
643						
	0	Cytoplasmic	2	0	OUT: 0	
642						
	0	CytoplasmicMembrane	0	0	IN: 4	
668						
	0	Cytoplasmic	3	0	OUT: 0	
669						
	18	Cytoplasmic	24	0	OUT: 0	
670						

	0	Cytoplasmic	0	0	OUT: 0	
671	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
664	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
665	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 1	
666	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
667	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
660	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	IN: 1	
661	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
662	✓	✗	✗	✗	✗	?
	0	Unknown	0	0	IN: 3	
663	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
656	✓	✗	✗	✗	✗	?

	0	CytoplasmicMembrane	0	0	IN: 11	
657	✖	✖	✓	✖	✓	✓
	15	Cytoplasmic	17	0	OUT: 0	
658	✓	✖	✖	✖	✓	✖
	0	Unknown	0	0	OUT: 0	
659	✓	✖	✖	✖	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
747	✓	✖	✓	✖	✓	✓
	0	Cytoplasmic	6	0	OUT: 0	
746	✓	✖	✖	✓	✓	?
	0	Cytoplasmic	0	3	OUT: 0	
745	✓	✖	✓	✖	✓	✖
	0	Cytoplasmic	1	0	OUT: 0	
744	✓	✖	✖	✖	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
751	✓	✓	✖	✓	✓	✖
	0	OuterMembrane	0	15	IN: 1	
750	✓	✖	✖	✖	✓	?
	0	Unknown	0	0	IN: 1	
749	✓	✖	✓	✖	✓	✓

	0	Cytoplasmic	16	0	OUT: 0	
748	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	IN: 0	
739	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	7	0	OUT: 0	
738	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	IN: 0	
737	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 0	
736	✓	✗	✗	✓	✓	?
	0	Unknown	0	3	IN: 1	
743	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	18	0	OUT: 0	
742	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 0	
741	✓	✗	✗	✓	✓	✗
	0	Unknown	0	10	OUT: 0	
740	✓	✗	✗	✓	✓	✗
	0	Cytoplasmic	0	3	OUT: 0	
762	✓	✗	✗	✗	✓	✓

	0	Cytoplasmic	0	0	OUT: 0	
763	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
760	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
766	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 0	
767	✓	✗	✗	✗	✗	✓
	0	Cytoplasmic	0	0	OUT: 2	
764	✗	✗	✓	✗	✓	✓
	54	Cytoplasmic	13	0	OUT: 0	
765	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMembrane	0	1	OUT: 9	
754	✓	✗	✗	✓	✓	✓
	0	CytoplasmicMembrane	0	6	OUT: 0	
755	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMembrane	0	18	IN: 4	
752	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	12	0	IN: 0	
753	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
758	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
759	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
756	✗	✗	✓	✗	✓	✓
	32	Cytoplasmic	19	0	IN: 1	
757	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	2	0	OUT: 7	
713	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
712	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	2	OUT: 0	
715	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
714	✗	✗	✗	✗	✗	✓
	11	CytoplasmicMembrane	0	0	IN: 15	

717						
	0	Unknown	0	0	OUT: 0	
716						
	0	Cytoplasmic	1	0	OUT: 0	
719						
	0	Unknown	0	0	OUT: 0	
718						
	0	CytoplasmicMembrane	13	4	IN: 3	
705						
	0	Cytoplasmic	0	0	OUT: 0	
704						
	2	Cytoplasmic	25	0	OUT: 0	
707						
	0	Cytoplasmic	0	0	OUT: 0	
706						
	0	CytoplasmicMembrane	2	0	OUT: 3	
709						
	0	Unknown	1	0	OUT: 0	
708						

	0	Cytoplasmic	1	0	OUT: 0	
711	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
710	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 0	
728	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	17	0	OUT: 0	
729	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
730	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	17	0	OUT: 0	
731	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
732	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 0	
733	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
734	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 0	
735	✓	✗	✗	✗	✓	✗

	0	Unknown	0	0	OUT: 0	
720	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
721	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 6	
722	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
723	✓	✓	✗	✓	✓	✓
	0	Extracellular	0	2	IN: 1	
724	✗	✗	✓	✗	✓	✓
	24	Cytoplasmic	34	0	IN: 0	
725	✓	✓	✗	✓	✓	✗
	0	OuterMembrane	0	15	OUT: 0	
726	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	1	OUT: 0	
727	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMembrane	0	1	OUT: 2	
821	✗	✗	✓	✗	✓	✓
	1	Cytoplasmic	7	0	OUT: 0	

820	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	0	CytoplasmicMembrane	2	0	OUT: 1	
823	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	0	Cytoplasmic	0	0	IN: 1	
822	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	0	CytoplasmicMembrane	0	0	OUT: 6	
817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	0	Cytoplasmic	0	0	OUT: 0	
816	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	0	Cytoplasmic	0	0	OUT: 0	
819	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	0	Cytoplasmic	2	0	OUT: 1	
818	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	0	Cytoplasmic	0	0	OUT: 0	
829	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	0	Cytoplasmic	0	0	OUT: 0	
828	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	0	Cytoplasmic	1	0	OUT: 0	
831	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

	0	Cytoplasmic	0	0	OUT: 0	
830	✓	✗	✗	✗	✗	✗
	0	Unknown	0	0	OUT: 2	
825	✓	✓	✓	✓	✓	?
	0	OuterMembrane	1	3	IN: 1	
824	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem brane	0	0	IN: 7	
827	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	IN: 1	
826	✗	✗	✓	✗	✓	?
	5	Cytoplasmic	1	0	OUT: 0	
805	✓	✓	✗	✗	✓	✗
	0	OuterMembrane	0	0	IN: 1	
806	✗	✗	✓	✗	✓	✓
	1	Cytoplasmic	5	0	OUT: 0	
807	✗	✗	✓	✗	✓	✓
	3	Cytoplasmic	7	0	OUT: 0	
800	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
801	✓	✗	✗	✗	✓	✓

	0	Unknown	0	0	OUT: 0	
802	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
803	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	12	0	OUT: 0	
812	✓	✗	✗	✗	✗	?
	0	Unknown	0	0	IN: 3	
813	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMem brane	0	0	IN: 5	
814	✓	✗	✓	✗	✗	✗
	0	CytoplasmicMem brane	1	0	IN: 3	
815	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
808	✗	✗	✓	✗	✓	✓
	2	Cytoplasmic	1	0	OUT: 0	
809	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
810	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 1	

811						
	0	CytoplasmicMembrane	0	1	OUT: 7	
791						
	0	Cytoplasmic	2	29	IN: 0	
790						
	0	Cytoplasmic	0	0	OUT: 0	
789						
	0	Cytoplasmic	0	0	OUT: 2	
788						
	0	Cytoplasmic	1	0	IN: 1	
787						
	0	Unknown	0	0	OUT: 0	
786						
	0	Cytoplasmic	0	0	OUT: 0	
785						
	0	Cytoplasmic	1	0	OUT: 0	
784						
	0	Cytoplasmic	0	0	OUT: 0	
799						
	0	Unknown	0	0	OUT: 0	

798						
	0	Unknown	0	1	IN: 1	
797						
	0	CytoplasmicMembrane	3	0	OUT: 4	
796						
	0	Unknown	0	0	OUT: 0	
795						
	0	Cytoplasmic	0	0	OUT: 0	
794						
	0	Cytoplasmic	1	0	OUT: 0	
793						
	1	Cytoplasmic	4	0	OUT: 0	
792						
	0	Cytoplasmic	27	2	OUT: 0	
774						
	4	Cytoplasmic	11	3	OUT: 1	
775						
	0	Cytoplasmic	2	1	OUT: 0	
772						
	0	CytoplasmicMem	1	0	IN: 4	

		brane				
773	✗	✗	✓	✗	✓	✓
	11	Cytoplasmic	27	0	OUT: 1	
770	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
771	✓	✗	✗	✗	✗	✗
	0	Unknown	0	0	OUT: 2	
768	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	OUT: 4	
769	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 1	
782	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
783	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
780	✓	✗	✓	✗	✓	✓
	0	Unknown	2	0	OUT: 0	
781	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	IN: 1	
778	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	7	0	OUT: 0	
779	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMembrane	22	24	OUT: 0	
776	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
777	✓	✗	✓	✗	✗	✗
	0	CytoplasmicMembrane	1	0	IN: 4	
881	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	IN: 0	
880	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	3	0	OUT: 0	
883	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	IN: 5	
882	✓	✗	✓	✗	✓	✗
	0	CytoplasmicMembrane	1	0	IN: 1	
885	✗	✗	✗	✗	✓	✓
	1	Cytoplasmic	0	0	OUT: 0	
884	✓	✗	✗	✗	✗	✗

	0	Unknown	0	0	OUT: 4	
887	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	9	OUT: 0	
886	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
889	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMem brane	15	5	OUT: 0	
888	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 5	
891	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	15	0	OUT: 0	
890	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
893	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	4	1	OUT: 0	
892	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	16	39	OUT: 1	
895	✓	✗	✓	✓	✓	✓
	0	Unknown	1	3	OUT: 0	

894						
	0	Cytoplasmic	0	0	IN: 1	
864						
	1	Cytoplasmic	3	0	OUT: 0	
865						
	0	Cytoplasmic	7	0	OUT: 0	
866						
	0	Cytoplasmic	0	0	OUT: 0	
867						
	0	CytoplasmicMembrane	0	0	IN: 3	
868						
	0	CytoplasmicMembrane	2	2	IN: 6	
869						
	0	Unknown	0	3	OUT: 2	
870						
	0	Cytoplasmic	0	0	IN: 0	
871						
	0	Cytoplasmic	2	0	OUT: 0	
872						

	0	Unknown	1	0	IN: 0	
873	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
874	✓	✓	✗	✗	✓	✗
	0	OuterMembrane	0	0	OUT: 0	
875	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	4	OUT: 0	
876	✓	✗	✗	✓	✗	✗
	0	CytoplasmicMem brane	0	3	IN: 12	
877	✓	✗	✗	✓	✗	?
	0	Cytoplasmic	0	4	IN: 5	
878	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
879	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 1	
851	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	3	OUT: 0	
850	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	5	0	OUT: 0	
849	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	4	0	IN: 0	
848	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	12	OUT: 0	
855	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
854	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem brane	0	0	IN: 12	
853	✓	✗	✗	✗	✓	✗
	0	CytoplasmicMem brane	0	0	IN: 1	
852	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
859	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	1	1	IN: 1	
858	✗	✗	✓	✗	✓	✓
	11	Cytoplasmic	1	0	IN: 1	
857	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 0	
856	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 1	

863						
	0	Cytoplasmic	1	0	OUT: 0	
862						
	0	Cytoplasmic	0	0	IN: 0	
861						
	0	Cytoplasmic	11	0	OUT: 0	
860						
	0	Cytoplasmic	1	0	OUT: 0	
834						
	0	Cytoplasmic	10	0	OUT: 0	
835						
	0	Cytoplasmic	0	2	OUT: 0	
832						
	0	Unknown	0	0	IN: 1	
833						
	0	Unknown	0	0	OUT: 0	
838						
	4	Cytoplasmic	13	0	IN: 3	
839						
	0	Cytoplasmic	22	2	OUT: 0	

836						
	0	Cytoplasmic	0	0	OUT: 0	
837						
	0	Extracellular	1	71	OUT: 0	
842						
	0	Cytoplasmic	2	0	OUT: 0	
843						
	0	CytoplasmicMembrane	0	0	OUT: 1	
840						
	0	Unknown	0	0	OUT: 2	
841						
	0	Cytoplasmic	8	0	OUT: 0	
846						
	0	Cytoplasmic	1	0	OUT: 0	
847						
	0	Cytoplasmic	1	0	OUT: 1	
844						
	0	CytoplasmicMembrane	0	2	IN: 12	
845						

	0	OuterMembrane	0	4	OUT: 2	
956	✗	✗	✓	✓	✓	✓
	3	Periplasmic	10	1	OUT: 0	
957	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
958	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
959	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
952	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 0	
953	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
954	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 1	
955	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
948	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 0	
949	✓	✗	✓	✗	✓	✓

	0	Unknown	1	0	OUT: 1	
950	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
951	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
944	✓	✗	✓	✗	✗	✗
	0	Unknown	1	0	IN: 3	
945	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
946	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
947	✗	✗	✓	✗	✓	✓
	4	CytoplasmicMembrane	4	0	OUT: 1	
941	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 12	
940	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	IN: 11	
943	✓	✗	✓	✗	✓	?

	0	CytoplasmicMembrane	1	0	OUT: 0	
942	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
937	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
936	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
939	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	21	0	OUT: 0	
938	✓	✓	✗	✗	✓	?
	0	Extracellular	0	0	IN: 1	
933	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 0	
932	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	OUT: 6	
935	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	27	9	IN: 0	
934	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMem	0	1	OUT: 5	

		brane				
929	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	28	0	OUT: 0	
928	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
931	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	OUT: 1	
930	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
926	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	2	2	OUT: 0	
927	✓	✗	✗	✗	✗	?
	0	Unknown	0	0	OUT: 2	
924	✓	✓	✗	✗	✓	✗
	0	OuterMembrane	0	0	IN: 1	
925	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	OUT: 7	
922	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	7	0	IN: 1	
923	✓	✗	✓	✓	✓	✓

	0	Cytoplasmic	4	1	OUT: 0	
920	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	5	2	OUT: 0	
921	✗	✗	✓	✓	✓	✓
	1	Cytoplasmic	22	2	OUT: 0	
918	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem brane	0	0	IN: 12	
919	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMem brane	1	1	IN: 1	
916	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	5	0	OUT: 0	
917	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
914	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	9	OUT: 0	
915	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	1	0	IN: 2	
912	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem	0	0	OUT: 11	

		brane				
913	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 1	
911	✓	✓	✗	✗	✓	✗
	0	OuterMembrane	0	0	OUT: 0	
910	✓	✗	✗	✗	✗	?
	0	Periplasmic	0	0	IN: 3	
909	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	11	0	IN: 0	
908	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 1	
907	✓	✓	✓	✓	✓	?
	0	OuterMembrane	1	1	IN: 1	
906	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 4	
905	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
904	✓	✗	✓	✗	✓	?
	0	CytoplasmicMembrane	1	0	OUT: 0	

903						
	0	Cytoplasmic	1	0	OUT: 0	
902						
	0	Unknown	0	0	IN: 1	
901						
	0	CytoplasmicMembrane	42	0	IN: 0	
900						
	0	Cytoplasmic	5	0	OUT: 0	
899						
	0	CytoplasmicMembrane	0	0	IN: 12	
898						
	0	CytoplasmicMembrane	0	5	OUT: 4	
897						
	0	CytoplasmicMembrane	2	0	IN: 18	
896						
	0	Cytoplasmic	17	0	IN: 0	
1016						
	0	CytoplasmicMem	0	0	IN: 8	

		brane				
1017	✗	✗	✓	✗	✗	✓
	5	Cytoplasmic	13	0	OUT: 3	
1018	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	11	2	OUT: 0	
1019	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1020	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1021	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1022	✓	✗	✓	✓	✓	?
	0	Cytoplasmic	1	5	IN: 1	
1023	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	IN: 1	
1008	✓	✓	✗	✗	✓	?
	0	OuterMembrane	0	0	OUT: 0	
1009	✗	✗	✓	✗	✓	✓
	15	CytoplasmicMembrane	6	0	OUT: 0	
1010	✗	✗	✓	✓	✓	✓

	6	Cytoplasmic	1	10	OUT: 0	
1011	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1012	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	4	0	OUT: 0	
1013	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 8	
1014	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1015	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 5	
1001	✓	✗	✗	✗	✗	?
	0	Cytoplasmic	0	0	IN: 2	
1000	✓	✓	✗	✓	✓	✗
	0	OuterMembrane	0	15	OUT: 0	
1003	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1002	✗	✗	✓	✗	✓	✓
	14	Cytoplasmic	23	0	OUT: 0	

1005						
	0	Unknown	0	0	OUT: 1	
1004						
	0	Cytoplasmic	11	1	IN: 3	
1007						
	0	Cytoplasmic	0	0	OUT: 0	
1006						
	0	Cytoplasmic	4	0	OUT: 0	
993						
	0	Unknown	0	0	OUT: 0	
992						
	0	Cytoplasmic	1	0	OUT: 0	
995						
	0	OuterMembrane	1	1	IN: 1	
994						
	0	Unknown	0	0	OUT: 0	
997						
	0	CytoplasmicMem brane	0	0	IN: 4	
996						
	0	Cytoplasmic	0	0	OUT: 0	

999						
	0	CytoplasmicMembrane	1	0	OUT: 5	
998						
	0	Unknown	0	0	OUT: 0	
986						
	0	Cytoplasmic	0	0	OUT: 0	
987						
	13	CytoplasmicMembrane	5	3	OUT: 0	
984						
	23	Cytoplasmic	2	0	OUT: 0	
985						
	0	CytoplasmicMembrane	1	0	OUT: 1	
990						
	0	Cytoplasmic	0	0	OUT: 0	
991						
	0	Unknown	0	3	OUT: 2	
988						
	0	Cytoplasmic	0	0	OUT: 0	
	.	.	.	.	.	.

989	0	Cytoplasmic	4	2	IN: 1	
978	✓	✗	✗	✓	✓	?
	0	Unknown	0	9	IN: 1	
979	✓	✗	✗	✗	✗	?
	0	Cytoplasmic	0	0	OUT: 2	
976	✓	✓	✗	✓	✓	✗
	0	OuterMembrane	0	14	OUT: 0	
977	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
982	✓	✓	✓	✓	✓	✓
	0	Extracellular	1	2	OUT: 0	
983	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
980	✓	✗	✓	✗	✓	✓
	0	CytoplasmicMem brane	4	0	OUT: 1	
981	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
971	✓	✓	✗	✓	✓	?
	0	OuterMembrane	0	2	OUT: 0	
970	✓	✗	✗	✗	✓	?

	0	Unknown	0	0	IN: 1	
969	✓	✗	✗	✓	✓	✓
	0	Periplasmic	0	7	OUT: 0	
968	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 2	
975	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	2	0	OUT: 2	
974	✓	✓	✗	✓	✓	✓
	0	Extracellular	0	14	OUT: 0	
973	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 1	
972	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
963	✓	✗	✗	✓	✓	✓
	0	CytoplasmicMem brane	0	3	IN: 1	
962	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
961	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMem	0	4	OUT: 3	

		brane				
960	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 5	
967	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	IN: 6	
966	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMembrane	28	35	OUT: 0	
965	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 0	
964	✓	✗	✗	✓	✓	✗
	0	Unknown	0	15	OUT: 0	
1100	✓	✗	✗	✗	✓	?
	0	CytoplasmicMembrane	0	0	OUT: 0	
1101	✗	✗	✗	✗	✓	✓
	30	Cytoplasmic	0	0	OUT: 0	
1102	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 0	
1103	✓	✗	✗	✗	✓	✗

	0	Cytoplasmic	0	0	OUT: 0	
1096	✓	✗	✓	✗	✗	✓
	0	Unknown	1	0	OUT: 2	
1097	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1098	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 1	
1099	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1092	✓	✓	✗	✗	✓	?
	0	Extracellular	0	0	OUT: 0	
1093	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	IN: 3	
1094	✓	✗	✗	✗	✓	✓
	0	Periplasmic	0	0	OUT: 1	
1095	✓	✗	✗	✗	✗	✗
	0	Unknown	0	0	OUT: 3	
1088	✓	✗	✗	✗	✓	✓
	0	CytoplasmicMembrane	0	0	OUT: 0	

1089						
	0	CytoplasmicMembrane	0	0	IN: 5	
1090						
	0	Unknown	0	0	IN: 0	
1091						
	0	Unknown	0	0	OUT: 0	
1117						
	0	Cytoplasmic	14	0	OUT: 0	
1116						
	0	Cytoplasmic	1	2	OUT: 1	
1119						
	0	Cytoplasmic	4	0	OUT: 0	
1118						
	0	Unknown	0	0	OUT: 0	
1113						
	0	Unknown	0	0	OUT: 0	
1112						
	0	CytoplasmicMembrane	2	0	IN: 1	
1115						

	0	Cytoplasmic	1	0	IN: 6	
1114	✓	✗	✗	✗	✗	?
	0	Cytoplasmic	0	0	OUT: 2	
1109	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
1108	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
1111	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	OUT: 6	
1110	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	IN: 3	
1105	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1104	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
1107	✗	✗	✓	✗	✓	✓
	43	Cytoplasmic	16	0	OUT: 0	
1106	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	

1134						
	0	Cytoplasmic	0	0	OUT: 0	
1135						
	0	Cytoplasmic	2	2	OUT: 0	
1132						
	0	Cytoplasmic	0	0	OUT: 0	
1133						
	0	CytoplasmicMembrane	0	0	IN: 2	
1130						
	0	CytoplasmicMembrane	1	0	IN: 4	
1131						
	0	Unknown	0	0	OUT: 0	
1128						
	0	Cytoplasmic	2	0	OUT: 0	
1129						
	0	CytoplasmicMembrane	0	0	IN: 1	
1126						
	0	Unknown	0	0	IN: 0	
	.	.	.	.	.	.

1127	0	CytoplasmicMembrane	0	0	OUT: 5	
1124	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	OUT: 3	
1125	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1122	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1123	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	IN: 0	
1120	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	IN: 0	
1121	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1151	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1150	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1149	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	1	0	OUT: 3	

1148						
	0	CytoplasmicMembrane	0	0	IN: 12	
1147						
	0	Cytoplasmic	0	0	OUT: 0	
1146						
	0	CytoplasmicMembrane	11	0	OUT: 0	
1145						
	0	Periplasmic	1	0	IN: 1	
1144						
	0	Cytoplasmic	1	0	IN: 1	
1143						
	0	Cytoplasmic	1	0	IN: 0	
1142						
	0	Cytoplasmic	3	0	IN: 1	
1141						
	0	Unknown	0	3	OUT: 0	
1140						
	0	Unknown	0	0	OUT: 0	
1139						

	0	Cytoplasmic	0	0	OUT: 0	
1138	✓	✗	✓	✗	✗	✓
	0	Unknown	1	0	OUT: 2	
1137	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	4	0	OUT: 0	
1136	✗	✗	✓	✗	✓	✓
	1	Cytoplasmic	1	0	OUT: 1	
1032	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1033	✓	✗	✗	✗	✓	?
	0	CytoplasmicMembrane	0	0	IN: 1	
1034	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 1	
1035	✓	✗	✓	✓	✓	?
	0	Cytoplasmic	1	2	IN: 1	
1036	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1037	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1038	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	25	0	OUT: 1	
1039	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1024	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	2	OUT: 0	
1025	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1026	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1027	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 2	
1028	✓	✗	✗	✗	✓	✓
	0	CytoplasmicMembrane	0	0	IN: 1	
1029	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1030	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	OUT: 2	
1031	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	10	0	OUT: 1	
1049	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1048	✓	✗	✓	✗	✗	✗
	0	CytoplasmicMembrane	1	0	IN: 4	
1051	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	IN: 0	
1050	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	1	1	OUT: 0	
1053	✓	✗	✗	✓	✓	?
	0	CytoplasmicMembrane	0	3	OUT: 0	
1052	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMembrane	0	4	OUT: 2	
1055	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1054	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1041	✓	✗	✓	✗	✓	✓

	0	CytoplasmicMembrane	10	0	OUT: 0	
1040	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1043	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
1042	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1045	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
1044	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 1	
1047	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	OUT: 3	
1046	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	6	23	OUT: 0	
1066	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1067	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	14	0	OUT: 0	

1064						
	0	Cytoplasmic	0	0	OUT: 0	
1065						
	0	Cytoplasmic	0	4	OUT: 0	
1070						
	0	Cytoplasmic	0	0	IN: 1	
1071						
	0	CytoplasmicMembrane	1	0	OUT: 0	
1068						
	0	Unknown	1	0	OUT: 0	
1069						
	0	Cytoplasmic	0	2	IN: 1	
1058						
	0	Cytoplasmic	5	3	IN: 0	
1059						
	0	Cytoplasmic	13	0	IN: 1	
1056						
	0	Cytoplasmic	0	1	OUT: 0	
1057						
	0	OuterMembrane	0	0	OUT: 0	

1062						
	0	Unknown	6	0	OUT: 0	
1063						
	0	Cytoplasmic	1	0	OUT: 0	
1060						
	0	Unknown	0	0	IN: 3	
1061						
	0	Cytoplasmic	25	0	OUT: 0	
1083						
	0	Cytoplasmic	0	0	IN: 0	
1082						
	0	Cytoplasmic	1	0	IN: 1	
1081						
	2	Cytoplasmic	17	0	OUT: 0	
1080						
	0	Cytoplasmic	1	0	OUT: 0	
1087						
	14	Cytoplasmic	13	14	IN: 0	
1086						
	0	Unknown	0	0	OUT: 0	

1085							
	0	CytoplasmicMembrane	0	0	OUT: 6		
1084							
	0	Unknown	0	0	IN: 1		
1075							
	0	Cytoplasmic	7	0	OUT: 0		
1074							
	14	Cytoplasmic	17	2	OUT: 0		
1073							
	0	Unknown	0	0	IN: 0		
1072							
	0	Cytoplasmic	0	0	OUT: 0		
1079							
	0	Cytoplasmic	0	0	OUT: 0		
1078							
	0	Periplasmic	0	0	IN: 1		
1077							
	209	CytoplasmicMembrane	21	0	IN: 2		
1076							

	8	CytoplasmicMembrane	21	1	IN: 4	
1221	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 6	
1220	✗	✗	✓	✓	✓	✓
	6	CytoplasmicMembrane	6	3	OUT: 0	
1223	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	OUT: 4	
1222	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	14	0	OUT: 0	
1217	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1216	✓	✓	✓	✗	✓	✓
	0	Extracellular	10	0	IN: 1	
1219	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1218	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	IN: 1	
1229	✓	✗	✗	✗	✓	✗

	0	CytoplasmicMembrane	0	0	OUT: 0	
1228	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1231	✓	✗	✗	✗	✓	✓
	0	CytoplasmicMembrane	0	0	OUT: 0	
1230	✓	✗	✗	✗	✗	✓
	0	Cytoplasmic	0	0	OUT: 2	
1225	✗	✗	✓	✗	✓	✓
	12	Cytoplasmic	11	0	OUT: 0	
1224	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1227	✓	✗	✗	✓	✗	✓
	0	Unknown	0	3	IN: 2	
1226	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1236	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1237	✓	✗	✗	✗	✓	✓
	0	CytoplasmicMem	0	0	OUT: 0	

		brane				
1238	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1239	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	OUT: 0	
1232	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMem brane	1	0	IN: 10	
1233	✗	✗	✓	✗	✓	✓
	11	Cytoplasmic	28	0	OUT: 0	
1234	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
1235	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1244	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1245	✓	✗	✓	✗	✗	?
	0	CytoplasmicMem brane	1	0	IN: 6	
1246	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	

1247						
	0	Cytoplasmic	0	0	OUT: 0	
1240						
	0	Unknown	0	15	OUT: 2	
1241						
	0	Unknown	0	0	OUT: 0	
1242						
	0	Cytoplasmic	8	0	OUT: 2	
1243						
	0	Unknown	0	0	OUT: 0	
1255						
	0	Cytoplasmic	3	0	OUT: 0	
1254						
	0	Cytoplasmic	3	0	IN: 0	
1253						
	0	Cytoplasmic	0	0	IN: 0	
1252						
	0	Unknown	0	0	IN: 1	
1251						
	0	Cytoplasmic	20	0	IN: 0	

1250						
	0	CytoplasmicMem brane	0	5	OUT: 5	
1249						
	0	Cytoplasmic	12	0	IN: 0	
1248						
	0	Unknown	0	0	OUT: 0	
1263						
	0	CytoplasmicMem brane	0	0	IN: 8	
1262						
	0	Cytoplasmic	0	0	OUT: 0	
1261						
	0	Cytoplasmic	0	0	IN: 1	
1260						
	10	Cytoplasmic	1	0	OUT: 3	
1259						
	0	Cytoplasmic	8	0	OUT: 0	
1258						
	0	Cytoplasmic	1	0	OUT: 2	
1257						

	0	Cytoplasmic	25	0	OUT: 0	
1256	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 1	
1270	✓	✗	✗	✗	✗	?
	0	Unknown	0	0	OUT: 2	
1271	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1268	✗	✗	✓	✗	✓	✓
	5	Cytoplasmic	20	0	OUT: 1	
1269	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	9	13	OUT: 5	
1266	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	3	0	OUT: 0	
1267	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	7	0	OUT: 0	
1264	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1265	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	OUT: 0	
1278	✓	✗	✗	✗	✓	✓

	0	Unknown	0	0	OUT: 1	
1279	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMembrane	0	0	OUT: 2	
1276	✓	✗	✗	✗	✓	?
	0	CytoplasmicMembrane	0	0	OUT: 0	
1277	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1274	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	7	2	OUT: 1	
1275	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1272	✓	✗	✗	✗	✓	✗
	0	CytoplasmicMembrane	0	0	OUT: 0	
1273	✓	✗	✓	✗	✓	✓
	0	Unknown	5	0	OUT: 1	
1153	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
1152	✗	✗	✓	✗	✓	✓

	25	Cytoplasmic	28	0	OUT: 0	
1155	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
1154	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
1157	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1156	✓	✗	✗	✗	✗	✓
	0	CytoplasmicMem brane	0	0	OUT: 6	
1159	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	3	IN: 1	
1158	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1161	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	17	0	OUT: 0	
1160	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMem brane	2	1	IN: 9	
1163	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	

1162						
	0	Cytoplasmic	2	2	OUT: 0	
1165						
	0	Unknown	1	0	OUT: 0	
1164						
	0	CytoplasmicMembrane	0	5	IN: 3	
1167						
	10	Cytoplasmic	3	0	OUT: 0	
1166						
	0	Cytoplasmic	1	0	IN: 0	
1168						
	0	CytoplasmicMembrane	0	0	OUT: 6	
1169						
	2	Cytoplasmic	18	17	OUT: 0	
1170						
	0	Cytoplasmic	0	0	IN: 1	
1171						
	7	Cytoplasmic	3	0	OUT: 0	
1172						

	0	Cytoplasmic	19	0	OUT: 2	
1173	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	1	1	OUT: 2	
1174	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
1175	✗	✓	✓	✗	✓	✓
	22	Extracellular	8	0	IN: 0	
1176	✗	✗	✓	✓	✓	✓
	23	Unknown	6	2	OUT: 0	
1177	✗	✗	✓	✗	✓	✓
	3	Cytoplasmic	7	0	OUT: 0	
1178	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
1179	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	IN: 2	
1180	✓	✗	✗	✓	✗	✗
	0	Unknown	0	3	IN: 3	
1181	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 0	

1182						
	0	Unknown	0	0	OUT: 0	
1183						
	0	Cytoplasmic	0	1	OUT: 1	
1187						
	0	Unknown	3	0	OUT: 2	
1186						
	0	Cytoplasmic	22	0	OUT: 1	
1185						
	0	Cytoplasmic	2	0	OUT: 0	
1184						
	0	OuterMembrane	1	1	OUT: 0	
1191						
	0	Cytoplasmic	0	0	OUT: 0	
1190						
	0	Unknown	0	0	OUT: 0	
1189						
	0	Unknown	1	0	IN: 1	
1188						
	0	Cytoplasmic	8	0	OUT: 1	

1195						
	0	Cytoplasmic	0	0	OUT: 0	
1194						
	0	Cytoplasmic	1	0	OUT: 0	
1193						
	0	Cytoplasmic	17	0	OUT: 0	
1192						
	0	Unknown	0	0	OUT: 0	
1199						
	0	Cytoplasmic	0	0	OUT: 0	
1198						
	0	CytoplasmicMembrane	0	0	OUT: 4	
1197						
	0	Cytoplasmic	8	0	OUT: 0	
1196						
	0	Cytoplasmic	1	0	IN: 0	
1202						
	0	OuterMembrane	0	0	IN: 1	
1203						
	0	CytoplasmicMem	2	0	OUT: 7	

		brane				
1200	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1201	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 1	
1206	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	1	IN: 0	
1207	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1204	✓	✓	✓	✗	✓	✓
	0	Extracellular	1	0	OUT: 0	
1205	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
1210	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 1	
1211	✓	✗	✗	✓	✗	?
	0	Cytoplasmic	0	3	IN: 3	
1208	✓	✓	✗	✓	✓	?
	0	OuterMembrane	0	4	OUT: 0	
1209	✓	✗	✓	✓	✗	✓

	0	CytoplasmicMembrane	1	1	OUT: 7	
1214	✓	✗	✓	✗	✗	?
	0	Cytoplasmic	2	0	IN: 3	
1215	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 11	
1212	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1213	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	OUT: 2	
1375	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 0	
1374	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 0	
1373	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1372	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 6	
1371	✓	✗	✗	✗	✓	✓

	0	Cytoplasmic	0	0	OUT: 0	
1370	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	25	0	IN: 0	
1369	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1368	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
1367	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
1366	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 0	
1365	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1364	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	8	0	OUT: 1	
1363	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1362	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
1361	✓	✗	✗	✗	✗	?

	0	CytoplasmicMembrane	0	0	OUT: 7	
1360	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1358	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	12	4	OUT: 0	
1359	✓	✓	✓	✓	✓	?
	0	OuterMembrane	1	3	IN: 1	
1356	✓	✗	✓	✓	✓	✓
	0	Cytoplasmic	1	4	OUT: 0	
1357	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	11	0	OUT: 0	
1354	✓	✓	✓	✗	✓	?
	0	OuterMembrane	1	0	IN: 1	
1355	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
1352	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
1353	✗	✗	✗	✗	✓	✓
	13	Cytoplasmic	0	0	OUT: 0	
1350	✓	✗	✓	✗	✗	?

	0	CytoplasmicMembrane	1	0	OUT: 6	
1351	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	17	0	OUT: 2	
1348	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	IN: 2	
1349	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	4	0	OUT: 0	
1346	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 5	
1347	✓	✗	✓	✗	✗	?
	0	CytoplasmicMembrane	1	0	IN: 4	
1344	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
1345	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1405	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 8	
	*	*	*	*	*	*

1404	0	Cytoplasmic	25	0	IN: 0	
1407	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1406	✗	✗	✗	✗	✓	✓
	8	Cytoplasmic	0	0	IN: 1	
1401	✓	✗	✗	✓	✓	?
	0	CytoplasmicMem brane	0	3	OUT: 0	
1400	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
1403	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
1402	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1397	✗	✗	✓	✗	✓	✓
	35	Cytoplasmic	1	0	OUT: 0	
1396	✓	✗	✓	✓	✓	✓
	0	CytoplasmicMem brane	25	9	OUT: 0	
1399	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	

1398						
	0	Unknown	0	0	OUT: 0	
1393						
	0	Unknown	0	15	OUT: 0	
1392						
	0	Cytoplasmic	0	0	OUT: 0	
1395						
	4	Cytoplasmic	6	1	OUT: 0	
1394						
	0	Cytoplasmic	1	0	OUT: 0	
1388						
	0	Cytoplasmic	0	0	OUT: 0	
1389						
	0	Cytoplasmic	24	0	IN: 1	
1390						
	0	Cytoplasmic	26	0	OUT: 0	
1391						
	0	Cytoplasmic	0	0	OUT: 1	
1384						
	0	Unknown	1	0	OUT: 0	

1385						
	0	Cytoplasmic	0	0	IN: 0	
1386						
	0	OuterMembrane	1	0	OUT: 0	
1387						
	0	Cytoplasmic	17	0	IN: 1	
1380						
	0	CytoplasmicMembrane	0	0	OUT: 2	
1381						
	0	Cytoplasmic	11	0	OUT: 0	
1382						
	0	Unknown	0	0	OUT: 2	
1383						
	0	CytoplasmicMembrane	0	0	IN: 4	
1376						
	0	CytoplasmicMembrane	1	0	OUT: 11	
1377						
	0	CytoplasmicMembrane	0	0	OUT: 3	

1378						
	0	Unknown	0	15	OUT: 2	
1379						
	0	CytoplasmicMembrane	1	6	IN: 1	
1307						
	0	Cytoplasmic	0	0	IN: 0	
1306						
	0	Unknown	0	0	IN: 0	
1305						
	0	Cytoplasmic	0	7	IN: 1	
1304						
	0	Cytoplasmic	0	0	OUT: 2	
1311						
	0	Cytoplasmic	0	0	OUT: 1	
1310						
	0	Unknown	0	0	OUT: 0	
1309						
	0	CytoplasmicMembrane	1	0	IN: 1	
1308						

	0	Cytoplasmic	0	0	OUT: 0	
1299	✓	✗	✗	✓	✓	?
	0	CytoplasmicMembrane	0	7	OUT: 0	
1298	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1297	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	4	0	IN: 1	
1296	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	19	0	OUT: 1	
1303	✓	✗	✗	✗	✗	?
	0	Unknown	0	0	OUT: 2	
1302	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1301	✓	✓	✓	✗	✗	✓
	0	OuterMembrane	1	0	OUT: 2	
1300	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 1	
1290	✓	✗	✗	✗	✗	✓
	0	Cytoplasmic	0	0	OUT: 2	
1291	✓	✗	✓	✗	✓	✗

	0	Cytoplasmic	3	0	IN: 1	
1288	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	OUT: 4	
1289	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
1294	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
1295	✗	✗	✓	✗	✓	✓
	17	Cytoplasmic	5	0	IN: 1	
1292	✓	✗	✗	✗	✗	✗
	0	Unknown	0	0	OUT: 2	
1293	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 1	
1282	✓	✗	✗	✓	✓	?
	0	Cytoplasmic	0	1	OUT: 0	
1283	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMembrane	0	5	IN: 2	
1280	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	

1281						
	0	Cytoplasmic	0	0	OUT: 0	
1286						
	0	Unknown	0	0	IN: 2	
1287						
	0	Cytoplasmic	0	0	OUT: 0	
1284						
	0	Cytoplasmic	0	0	OUT: 0	
1285						
	0	Cytoplasmic	0	0	OUT: 0	
1337						
	0	Unknown	1	0	OUT: 0	
1336						
	0	Cytoplasmic	6	0	OUT: 0	
1339						
	0	CytoplasmicMembrane	0	0	IN: 12	
1338						
	0	Extracellular	0	4	OUT: 0	
1341						
	0	CytoplasmicMem	0	0	OUT: 5	

		brane				
1340	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	2	OUT: 0	
1343	✓	✗	✗	✗	✓	✗
	0	CytoplasmicMem brane	0	0	IN: 1	
1342	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1329	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	OUT: 5	
1328	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1331	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	3	0	OUT: 0	
1330	✗	✗	✓	✓	✓	✓
	97	Cytoplasmic	25	6	IN: 0	
1333	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	IN: 0	
1332	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	

1335						
	0	Cytoplasmic	0	0	OUT: 0	
1334						
	0	Unknown	0	0	OUT: 0	
1320						
	0	CytoplasmicMem brane	0	0	OUT: 0	
1321						
	0	CytoplasmicMem brane	1	0	OUT: 4	
1322						
	0	Cytoplasmic	14	3	OUT: 0	
1323						
	0	Cytoplasmic	0	0	IN: 1	
1324						
	39	Cytoplasmic	25	1	OUT: 0	
1325						
	0	Cytoplasmic	3	0	OUT: 0	
1326						
	0	Unknown	0	0	IN: 1	
1327						

	0	Cytoplasmic	1	0	OUT: 0	
1312	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1313	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1314	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1315	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	27	0	OUT: 1	
1316	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	IN: 2	
1317	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	IN: 1	
1318	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1319	✗	✗	✗	✓	✓	✓
	22	Cytoplasmic	0	5	OUT: 0	
1494	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	10	0	OUT: 0	
1495	✓	✗	✓	✗	✓	✓

	0	Cytoplasmic	2	0	OUT: 0	
1492	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1493	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1490	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1491	✗	✗	✓	✗	✓	✓
	10	Cytoplasmic	24	0	OUT: 0	
1488	✓	✗	✓	✗	✗	?
	0	Cytoplasmic	1	0	IN: 2	
1489	✓	✗	✗	✗	✓	?
	0	CytoplasmicMembrane	0	0	IN: 1	
1502	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	16	0	OUT: 1	
1503	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1500	✓	✗	✗	✗	✓	✗
	0	CytoplasmicMembrane	0	0	OUT: 1	

1501						
	0	Unknown	0	0	IN: 0	
1498						
	0	Cytoplasmic	2	0	IN: 0	
1499						
	0	Unknown	1	0	OUT: 0	
1496						
	0	Cytoplasmic	3	0	OUT: 1	
1497						
	8	Cytoplasmic	25	0	OUT: 0	
1479						
	0	Cytoplasmic	5	0	OUT: 0	
1478						
	0	CytoplasmicMembrane	1	1	OUT: 1	
1477						
	0	Cytoplasmic	0	0	OUT: 0	
1476						
	0	Cytoplasmic	0	0	OUT: 1	
1475						
	0	Cytoplasmic	0	0	OUT: 0	

1474						
	0	Unknown	0	0	OUT: 0	
1473						
	0	Unknown	1	3	OUT: 1	
1472						
	0	Unknown	0	0	IN: 0	
1487						
	0	Cytoplasmic	0	0	OUT: 0	
1486						
	0	CytoplasmicMembrane	0	0	IN: 2	
1485						
	0	Cytoplasmic	0	0	OUT: 2	
1484						
	0	OuterMembrane	0	3	OUT: 0	
1483						
	0	CytoplasmicMembrane	0	0	IN: 2	
1482						
	0	CytoplasmicMembrane	3	19	IN: 1	
	.	.	.	.	.	.

1481	0	Cytoplasmic	2	0	OUT: 0	
1480	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	2	2	OUT: 3	
1524	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1525	✓	✗	✓	✗	✗	✓
	0	Cytoplasmic	2	0	OUT: 2	
1526	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1527	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1520	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1521	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	OUT: 0	
1522	✓	✗	✓	✗	✓	✓
	0	CytoplasmicMembrane	1	0	OUT: 1	
1523	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	

1532						
	0	Unknown	0	3	OUT: 0	
1533						
	0	Unknown	0	0	OUT: 0	
1534						
	0	CytoplasmicMembrane	1	0	OUT: 1	
1535						
	0	Extracellular	0	22	OUT: 0	
1528						
	0	Cytoplasmic	0	0	OUT: 0	
1529						
	0	Cytoplasmic	0	3	OUT: 0	
1530						
	3	Cytoplasmic	17	0	OUT: 0	
1531						
	0	Unknown	0	0	OUT: 2	
1509						
	0	Unknown	1	0	IN: 0	
1508						
	0	CytoplasmicMem	1	0	OUT: 8	

		brane				
1511	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	IN: 12	
1510	✓	✗	✓	✗	✗	?
	0	CytoplasmicMem brane	1	0	IN: 5	
1505	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1504	✓	✗	✗	✗	✗	?
	0	CytoplasmicMem brane	0	0	OUT: 4	
1507	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1506	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 0	
1517	✓	✗	✓	✗	✓	✓
	0	Unknown	1	0	OUT: 0	
1516	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1519	✓	✗	✗	✗	✓	✗

	0	Unknown	0	0	OUT: 1	
1518	✓	✗	✓	✗	✓	?
	0	Cytoplasmic	1	0	OUT: 0	
1513	✗	✗	✓	✗	✓	✓
	4	Cytoplasmic	10	0	OUT: 0	
1512	✗	✗	✓	✗	✓	✓
	13	Cytoplasmic	14	0	IN: 0	
1515	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
1514	✗	✗	✓	✗	✓	✓
	4	Cytoplasmic	2	0	OUT: 0	
1426	✗	✗	✓	✗	✓	✓
	21	Cytoplasmic	17	0	OUT: 0	
1427	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	IN: 0	
1424	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1425	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1430	✓	✗	✗	✗	✓	✓

	0	Unknown	0	0	IN: 0	
1431	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1428	✓	✗	✗	✓	✓	✓
	0	Unknown	0	3	OUT: 1	
1429	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1434	✓	✗	✗	✓	✗	✓
	0	CytoplasmicMem brane	0	4	OUT: 6	
1435	✗	✗	✓	✓	✓	✓
	6	Cytoplasmic	4	1	OUT: 0	
1432	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1433	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 1	
1438	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1439	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1436	✓	✗	✓	✗	✗	✗

	0	CytoplasmicMembrane	1	0	OUT: 3	
1437	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 0	
1411	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 5	
1410	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	IN: 1	
1409	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1408	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1415	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1414	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMembrane	0	0	IN: 3	
1413	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	2	2	OUT: 3	
1412	✓	✗	✗	✗	✓	?

	0	Cytoplasmic	0	0	IN: 0	
1419	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	5	0	IN: 0	
1418	✓	✗	✓	✓	✗	✓
	0	CytoplasmicMembrane	1	3	IN: 3	
1417	✓	✗	✗	✗	✗	?
	0	Cytoplasmic	0	0	OUT: 2	
1416	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1423	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 1	
1422	✗	✗	✓	✓	✓	✓
	2	Cytoplasmic	13	1	OUT: 0	
1421	✓	✗	✗	✗	✓	✗
	0	Cytoplasmic	0	0	OUT: 0	
1420	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	IN: 0	
1456	✓	✗	✗	✗	✗	?
	0	CytoplasmicMembrane	0	0	IN: 10	

1457						
	0	Cytoplasmic	1	0	IN: 0	
1458						
	0	Cytoplasmic	1	0	OUT: 0	
1459						
	0	Unknown	0	0	IN: 1	
1460						
	0	Cytoplasmic	0	3	OUT: 0	
1461						
	0	Unknown	0	0	OUT: 0	
1462						
	0	Cytoplasmic	1	0	OUT: 0	
1463						
	0	Unknown	0	0	OUT: 0	
1464						
	0	Cytoplasmic	0	5	IN: 0	
1465						
	0	CytoplasmicMembrane	1	0	IN: 8	
1466						
	0	CytoplasmicMem	0	0	IN: 2	

		brane				
1467	✓	✓	✗	✓	✓	✗
	0	OuterMembrane	0	15	IN: 1	
1468	✓	✗	✗	✗	✗	✓
	0	Cytoplasmic	0	0	OUT: 2	
1469	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 1	
1470	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	17	0	OUT: 0	
1471	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1441	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMem brane	1	0	IN: 9	
1440	✗	✗	✓	✗	✓	✓
	10	Cytoplasmic	9	0	OUT: 0	
1443	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1442	✓	✗	✓	✗	✗	?
	0	CytoplasmicMem brane	1	0	OUT: 6	

1445						
	0	Unknown	0	0	OUT: 0	
1444						
	0	Cytoplasmic	9	0	OUT: 3	
1447						
	0	Unknown	0	0	IN: 1	
1446						
	0	Cytoplasmic	1	0	OUT: 0	
1449						
	0	Cytoplasmic	40	0	OUT: 0	
1448						
	0	CytoplasmicMem brane	0	0	OUT: 0	
1451						
	0	Unknown	0	0	IN: 0	
1450						
	0	Unknown	0	0	OUT: 0	
1453						
	0	Cytoplasmic	2	0	OUT: 0	
1452						
	0	Cytoplasmic	0	0	IN: 0	

1455						
	0	Cytoplasmic	0	0	IN: 0	
1454						
	0	Unknown	0	0	IN: 1	
1576						
	0	Unknown	0	0	OUT: 1	
1574						
	0	CytoplasmicMembrane	1	0	IN: 3	
1575						
	0	Unknown	17	0	OUT: 1	
1572						
	0	Cytoplasmic	0	0	OUT: 0	
1573						
	32	Cytoplasmic	24	0	OUT: 0	
1570						
	16	CytoplasmicMembrane	16	113	OUT: 0	
1571						
	0	Cytoplasmic	0	0	OUT: 0	
1568						

	0	Unknown	0	0	IN: 1	
1569	✓	✗	✗	✗	✓	?
	0	CytoplasmicMembrane	0	0	IN: 1	
1548	✓	✗	✓	✗	✓	✗
	0	Cytoplasmic	1	0	IN: 0	
1549	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	OUT: 0	
1550	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	IN: 1	
1551	✓	✗	✓	✗	✓	✓
	0	Unknown	8	0	OUT: 0	
1544	✓	✗	✗	✗	✓	?
	0	Unknown	0	0	OUT: 1	
1545	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
1546	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1547	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	IN: 1	
1540	✓	✗	✓	✗	✓	✗

	0	Cytoplasmic	1	0	OUT: 0	
1541	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1542	✓	✗	✗	✗	✗	✓
	0	Cytoplasmic	0	0	IN: 2	
1543	✓	✗	✓	✗	✓	✗
	0	Unknown	1	0	OUT: 1	
1536	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	20	0	OUT: 0	
1537	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1538	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	2	0	OUT: 0	
1539	✗	✗	✓	✗	✓	✓
	1	Cytoplasmic	2	0	OUT: 0	
1565	✓	✗	✗	✗	✓	✓
	0	Unknown	0	0	IN: 0	
1564	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1567	✓	✗	✗	✗	✓	✓

	0	Cytoplasmic	0	0	OUT: 0	
1566	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1561	✓	✗	✗	✗	✓	?
	0	Cytoplasmic	0	0	OUT: 0	
1560	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1563	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMem brane	1	0	IN: 3	
1562	✓	✗	✗	✓	✗	?
	0	CytoplasmicMem brane	0	1	OUT: 4	
1557	✓	✗	✓	✗	✓	?
	0	Unknown	1	0	OUT: 1	
1556	✓	✗	✓	✗	✓	✓
	0	Cytoplasmic	1	0	OUT: 0	
1559	✓	✗	✗	✗	✗	✗
	0	CytoplasmicMem brane	0	0	IN: 9	
1558	✓	✗	✗	✗	✓	?

	0	Unknown	0	0	OUT: 0	
1553	✓	✗	✗	✗	✓	✓
	0	Cytoplasmic	0	0	OUT: 0	
1552	✓	✗	✗	✓	✓	✓
	0	Cytoplasmic	0	8	OUT: 0	
1555	✓	✗	✓	✗	✗	✓
	0	CytoplasmicMembrane	1	0	OUT: 18	
1554	✓	✗	✗	✗	✓	✗
	0	Unknown	0	0	OUT: 0	
1576	1452	65	667	267	1254	1273

Prioritized Proteins: 10

#### Epitope Analysis

Seq. Id	B Cell Epitope	T Cell Epitope	Location	Log Score	Score	MHC-I Allele Count	MHC-II Allele Count
3	WLDGVYDINENNGIKAYYQY	YDINENNGI	278	3.69	40.0	7	5
	PFVSPFQFILDARYNWRKTT	FVSPFQFIL	704	4.4	81.27	24	5
		FQFILDARY	708	4.61	100.0	18	5
		FILDARYNW	710	172.72	172.72	4	8
		VLTYFNYQR	568	-1.83	0.02	21	4
	VLTYFNYQRSFVPPQLDVLS	YQRSFVPPQ	574	0.88	2.4	3	31

		LTYFNYQRS	569	2.58	13.2	3	1
		YFNYQRFSV	571	119.6	119.6	12	10
PSFIKSLGNLLYNTYVRSG		FIKSLGNNL	223	0.74	2.1	40	6
		IKSLGNNL	224	6.21	500.0	20	15
DYSGQVNLDGYSGITAPKSWQ		YSGQVNLDGY	44	1.32	3.75	50	3
		YSGITAPKS	52	147.09	147.09	5	6
SYGGAEYFTQHFDTVEAGAR		FDTVEAGAR	598	149.26	149.26	6	2
EAGARYTYKDKFSFNADYFR		YTYKDKFSF	607	0.41	1.5	63	20
		YKDKFSFNA	609	4.46	86.8	35	4
GSRTVISNKALTQQANQSI		LTQQANQSI	81	1.93	6.92	40	1
APKSWQDEEVKKYTGSRTVI		WQDEEVKKY	61	1.32	3.75	72	1
		VKKYTGSRT	66	4.61	100.0	9	3
GGMINKHVGIQAQANWVRGQ		IQAQANWVR	249	-1.43	0.02	66	1
		INKHVGIA	243	113.39	113.39	11	4
FGDLDKVGGTFSFTYYGQLM		VGGTFSFTY	343	-0.47	0.5	84	4
		FSFTYYGQL	347	1.78	5.91	216	2
NSPSNISNYWLDGVYDINEN		YWLDGVYDI	272	106.1	106.1	130	13
PLTDLNGDVLKGTSYNKHFP		VLKGTSYNK	692	-0.22	0.03	56	1
PPDKTGDPFIKSLGNLLY		FIKSLGNNL	223	0.74	2.1	150	6
		IKSLGNNL	224	6.21	500.0	60	15
WNIQVSQIFWENGRHRVTGS		WNIQVSQIF	785	0.69	2.0	128	20
		IFWENGRHR	792	1.1	3.0	16	2