

Table S1. Toxicity screening of flavonoids isolated from *Erythrina* plants

No	Compound Name	Toxicity		
		Mutagenic	hERG Inhibitor	Hepatotoxic
Flavones				
1	6-Prenylapigenin	x	✓	x
2	Luteolin	x	x	x
3	Vogelin C	x	✓	x
4	Vogelin J	x	✓	✓
5	Carpachromene	x	x	x
6	Atalantoflavone (Limonianin)	x	✓	✓
7	Neocyclomorusin	x	✓	x
8	Salvigenin	x	x	x
9	Tetramethylisoscutellarein	✓	✓	x
10	Sinensetin	x	✓	x
11	Vitexin	x	✓	x
12	Isovitexin	x	x	x
13	Isovitexin-2"-β-D-glucopyranoside	x	✓	x
14	Apigenin-7-O-rhamnosyl-6-C-glucoside	x	✓	x
15	Vicenin-1	x	✓	x
16	Vicenin-2	x	✓	x
17	Isoorientin	x	x	x
18	Diosmetin-6-C-glucoside	x	✓	x
Flavonols				
19	3,7,4'-Trihydroxyflavone	x	✓	x
20	Kaempferol-3-O-(2"-O-β-D-glucopyranosyl-6"-O-α-L-rhamnopyranosyl-β-D-glucopyranoside)	x	✓	x
21	Kaempferol-3-O-β-D-glucopyranosyl-(1→2)-β-D-glucopyranoside	x	✓	x
Flavanones				
22	Liquiritigenin	✓	x	x
23	Isobavachin	✓	✓	x
24	Glabrol	x	✓	x
25	Erythribiyssin K	✓	x	x
26	Liquiritigenin-5'-O-methyl ether	✓	x	x
27	7,3',4'-Trihydroxyflavanone	✓	x	x
28	5'-(2-Hydroxy-3-methylbut-3-enyl) abyssinone II	x	✓	x
29	7-Hydroxy-4'-methoxy-3'-(3-hydroxy-3-methyl-trans-but-1-enyl)-5'-(3-methylbut-2-enyl) flavanone	x	x	x
30	Abyssinone I	x	✓	x
31	Abyssinone II	x	✓	x
32	Abyssinone III	x	✓	x
33	Abyssinone IV	x	✓	x
34	Abyssinone-IV-4'-O-methyl ether	x	✓	x
35	Erylatissin C	x	✓	x
36	5-Deoxyabyssinin II	x	✓	x
37	7-Hydroxy-4'-methoxy-3'-(3-methylbut-2-enyl)flavanone	x	✓	x
38	2(S)-5',7-Dihydroxy-[2",2"- (3"-hydroxy-dimethylpyrano]- (5",6":3',4')flavanone	x	x	x

39	2(S)-5',7-Dihydroxy-[2",2"- (3"- hydroxy)-dimethylpyrano]- (5",6":3',4')flavanone	✓	x	x
40	Erythribiussin G	x	✓	x
41	Erythribiussin I	✓	✓	x
42	Erylivingstone I	✓	x	x
43	Naringenin	✓	x	x
44	Isosakuranetin	✓	✓	x
45	Eriodictyol (-5.061, mode 41)	x	x	x
46	Homohesperetin	✓	x	x
47	3'-Prenylnaringenin	x	✓	x
48	Licoflavanone-4'-O-methyl ether	x	✓	x
49	Abyssinone V	x	✓	x
50	Abyssinone-V-4'-O-methyl ether	x	✓	x
51	6-Prenylabyssinone V	x	✓	x
52	Ilespedezaflavanone B (Euchrestaflavanone A)	x	✓	x
53	5-Hydroxysophoranone	x	✓	x
54	Burttinonedehydrate	x	✓	x
55	Burttinone	x	✓	x
56	Erycaffra D (-5.423, mode 33)	x	x	x
57	Erycaffra F (-5.998, mode 12)	x	x	x
58	Sigmoidin A	x	✓	x
59	Sigmoidin B	x	✓	x
60	3'-O-Methylsigmoidin	x	x	x
61	4'-O-Methylsigmoidin	x	x	x
62	Sigmoidin C	x	x	x
63	Sigmoidin D	x	x	x
64	Sigmoidin E	x	x	x
65	Sigmoidin F	x	x	x
66	Sigmoidin G	x	x	x
67	2(S)-5,5',7-Trihydroxy-2'-prenyl- (2",2"-dimethylpyrano)-(5",6":3',4')flavanone	x	✓	x
68	2(S)-5,5',7-Trihydroxy- [2"(5"- hydroxy)-methylpyrano]-(5",6":3',4')flavanone	x	✓	x
69	2 (S)-5,7-Dihydroxy-3'-methoxy- [2"(5"-hydroxy)-methylpyrano]- (5",6":3',4')flavanone	x	x	x
70	2(S)-5,7-Dihydroxy-[(5",6":3',4')- (2",2"-dimethylpyrano)-(5",6":5',6')]- (2",2"- dimethylpyrano)flavanone	x	✓	x
71	Erysenegalone (Erythrisenegalone)	x	✓	x
72	Citflavanone	x	✓	x
73	Lonchocarpol A (Senegalensein)	x	✓	x
74	Lonchocarpol C	x	✓	x
75	Lonchocarpol D	x	✓	x
76	Lupinifolin	x	✓	x
77	Fuscaflavanones A1	x	✓	x
78	Fuscaflavanones A2	x	✓	x
79	Fuscaflavanones B	x	✓	x
80	Abyssinin I	x	✓	x
81	Abyssinoflavanone II (Abyssinin II)	x	x	x
82	Abyssinin III	x	✓	x
83	Abyssinoflavanone IV	x	✓	x
84	Abyssinoflavanone V	x	✓	x

85	Abyssinoflavanone VI	x	✓	x
86	Abyssinoflavanone VII	x	✓	x
87	2(S)-5'-(2-Hydroxy-3-methylbut-3-enyl)licoflavone-4'-O-methyl ether	x	✓	x
88	2(S)-5,7-Dihydroxy-5'-prenyl-[2",2"- (3"-hydroxy)-dimethylpyrano]- (5",6":3',4') flavanone	x	✓	x
89	2(S)-5,7-Dihydroxy-5'-methoxy-[2",2"- (3"-hydroxy)-dimethylpyrano]- (5",6":3',4') flavanone	x	x	x
90	2(S)-5,7-Dihydroxy-[2",2"- (3",4"-dihydroxy)-dimethylpyrano]- (5",6":3',4') flavanone	x	x	x
91	2(S)-5,7-Dihydroxy-5'-prenyl [2",2"- (3",4"-dihydroxy)-dimethylpyrano]- (5",6":3',4') flavanone	x	✓	x
92	2(S)-5,5',7-Dihydroxy-6'-prenyl [2",2"- (3",4"-dihydroxy)-dimethylpyrano]- (5",6":3',4') flavanone	x	x	x
93	2(S)-5,5',7-Trihydroxy-[2",2"- (4"-chromanone)-dimethylpyrano]- (5",6":3',4') flavanone	x	x	x
94	(2S)-5,7-Dihydroxy-5'-prenyl-2"- (4"-hydroxyisopropyl)-dihydrofuran-1",3":3',4] flavanone	x	✓	x
95	(2S)-5,7-Dihydroxy-5'-methoxy-2"- (4"-hydroxyisopropyl)- dihydrofuran-1",3":3',4] flavanone	x	✓	x
96	(2S)-5,7,5'-Trihydroxy-2"- (4"-hydroxyisopropyl)-dihydrofuran-1",3":3',4] flavanone	x	✓	x
97	(2S)-5,7-Dihydroxy-5'-prenyl-2"- (4"-hydroxyisopropyl)-3"-hydroxy-dihydrofuran-1",3":3',4] flavanone	x	✓	x
98	(2S)-5,7,5'-Trihydroxy-2"- (4"-hydroxyisopropyl)-3"-hydroxy-dihydrofuran-1",3":3',4] flavanone	✓	x	x
99	(2S)-5,7,5'-Trihydroxy-6'-prenyl-2"- (4"-hydroxyisopropyl)-3"-hydroxy-dihydrofuran-1",3":4',5] flavanone	x	x	x
100	Addisoniaflavanone I	x	x	x
101	Addisoniaflavanone II	x	x	x
102	Addisoniaflavanone III	x	✓	x
103	5,7-Dihydroxy-3',4'-dimethoxy-5'- (3-methylbut-2-enyl)flavanone	x	x	x
104	Erylivingstone A	x	x	x
105	Erylivingstone B	x	x	x
106	Erylivingstone C	x	x	x
107	Erylivingstone D	x	x	x
108	Erylivingstone E	x	✓	x
109	Erylivingstone F	x	✓	x
110	Erylivingstone G	x	x	x
111	Erylivingstone H	x	x	x
112	Hamiltone A	x	x	x
113	6-Methoxyhamiltone A	✓	x	x

Chalcones

114	Isobavachalcone	x	x	x
115	Isoliquiritigenin	x	✓	x
116	Licoagrochalcone A	✓	x	x
117	Abyssinone VI	x	✓	x
118	Abyssinone-VI-4-O-methyl ether	x	✓	x
119	Butein	x	✓	x
120	3-O-Methylbutein	x	x	x
121	5-Prenylbutein	x	✓	x
122	Abyssinone A	x	✓	x

123	Abyssinone B	x	✓	x
124	Abyssinone C	x	✓	x
125	Abyssinone D	x	✓	x
126	2,4,4'-Trihydroxychalcone	x	✓	x
127	6'-Hydroxy-2',3',4',4'- tetramethoxychalcone	x	x	x
Isoflavans				
128	Eryzerin C	x	✓	x
129	4',7-Dihydroxy-2'-methoxy-3'-(3- methylbut-2-enyl)isoflavan	x	✓	x
130	Eryzerin D	x	✓	x
131	Eryzerin C	x	✓	x
132	Eryvarin T	✓	✓	x
133	Erythribidin A	✓	x	x
134	Phaseollininisoflavan	x	x	x
135	2'-Methoxyphaseollininisoflavan	x	x	x
136	Erylivingstone J	x	x	x
137	Erylivingstone K	x	x	x
138	2',7-Dihydroxy-3' -(3-methylbut-2- enyl)-2",2"-dimethylpyrano [5",6":4',5']isoflavan	x	x	✓
Isoflav-3-enes				
139	Erypoegin A (Burttinol C)	x	x	x
140	Erypoegin B (Burttinol B)	✓	✓	x
141	Burttinol A	✓	✓	x
142	7,4'-Dihydroxy-2',5'- dimethoxyisoflav-3-ene	x	✓	x
143	Bidwillol A	✓	x	x
144	Eryvarin H	x	✓	x
145	Eryvarin I	✓	x	x
146	Eryvarin O	x	x	x
Isoflavanones				
147	Vestitone	x	x	✓
148	Eriotrichin B (Bidwillon A)	x	x	x
149	Prostratol C	x	✓	x
150	Erythribyssin E	x	x	x
151	Erythribyssin J	x	x	x
152	Orientanol D	x	x	x
153	Orientanol F	x	✓	x
154	5,2',4'-Trihydroxy-6-prenyl-2",2'"dimethylidihydropyrano[5",6"] isoflavanone	x	✓	x
155	5-Deoxyglasperin F	x	✓	x
156	5-Deoxylicoisoflavanones	x	✓	x
157	Sigmoidin H	x	x	x
158	Sigmoidin I	x	x	x
159	Sigmoidin J	x	x	x
160	Bidwillon B	x	x	x
161	2,3-Dihydro-2'-hydroxyneobavaisoflavanone	x	✓	x
162	Eryvellutinone	x	✓	x
163	Eryzerin A	x	✓	x
164	Eryvarin B	x	✓	x
165	Eryvarin M	x	x	x
166	Eryvarin N	✓	x	x
167	Eryvarin V	✓	x	x

168	Eryzerin B	x	✓	x
169	Erycaffra E	x	✓	x
170	5,7-Dihydroxy-2',4',5'trimethoxyisoflavanone	x	x	x
171	Orientanol E	x	x	x
172	2,3-Dihydro-2'-hydroxyosajin	x	✓	x
173	Erythraddison III	x	x	x
174	Erythraddison IV	x	✓	x
175	2,3-Dihydropratensein	✓	✓	x
176	5,7,3'-Trihydroxy-4'-methoxy-6,5'di(γ,γ-dimethylallyl)isoflavanone	x	✓	x
177	(R)-saclenone	x	✓	x
178	5,3'-Dihydroxy-4'-methoxy-5'-γ,γ-dimethylallyl-2",2"-dimethylpyrano[5,6:6,7] isoflavanone	x	x	x
179	5,3'-Dihydroxy-2",2"-dimethylpyrano-[5,6:6,7]-2",2"-dimethylpyrano[5,6:5,4] isoflavanone	x	✓	x
180	2,3-Dihydroauriculatin	x	x	x
181	5,4-Dihydroxy-2-methoxy-8-(3,3- dimethylallyl)-2,2-dimethylpyrano [5,6:6,7]isoflavanone	x	✓	x
182	Glyasperin F	x	✓	x
183	Licoisoflavanones	✓	✓	x
184	Vogelin A (Lysisteisoflavanone)	✓	x	x
185	Erypoegin C (Vogelin B)	x	x	x
186	Erypoegin D	x	✓	x
187	Erypoegin G	x	✓	x
188	Vogelin D	x	✓	x
189	Auriculatin 4'-O-glucoside	x	✓	x
Isoflavones				
190	Daidzein	x	x	x
191	8-Prenyldaidzein	✓	✓	x
192	Neobavaisoflavone	✓	✓	✓
193	Erysubin F	✓	✓	✓
194	Eryvarin S	✓	✓	✓
195	Erythraddison II	✓	✓	✓
196	2',7-Dihydroxy-4'-methoxy-5'-(3- methylbut-2-enyl)isoflavone	x	✓	✓
197	Calycosin	x	✓	x
198	5-Deoxy-3'-prenylbiochanin A	x	✓	x
199	Erylatissin A	✓	✓	x
200	Erylatissin B	x	✓	x
201	Corylin	x	x	x
202	Bidwillon C	x	x	✓
203	Erythrinin A	x	✓	x
204	Genistein	x	✓	✓
205	6-Hydroxygenistein	✓	✓	x
206	6,8-Diprenygenistein	✓	✓	x
207	Wighteone (Erythrinin B) (6-Prenygenistein)	x	✓	x
208	Lupiwighteone (8-Prenygenistein)	x	✓	x
209	Isowighteone (3'-Isoprenygenistein)	✓	✓	x
210	Isolupabigenin	x	✓	x
211	6,8-Diprenylorobol	x	✓	✓
212	3'-O-Methylorobol	x	✓	x

213	5,4'-Dihydroxy-7-methoxy-3'-(3- methylbuten-2-yl)isoflavone	x	✓	x
214	5,2',4'-Trihydroxy-7-methoxy-5'-(3- methylbuten-2-yl)isoflavone	x	✓	✓
215	Cajanin	x	✓	x
216	3'-Formyl-5,4'-dihydroxy-7- methoxyisoflavone	x	✓	x
217	5,4'-Dihydroxy-7-methoxy-3'-(3- methyl-2-hydroxybuten-3-yl) isoflavone	x	✓	x
218	5-Hydroxy-3"-hydroxy-2",2"- dimethyldihydropyrano[5",6":3',4']isoflavone	x	✓	x
219	4'-Hydroxy-5,7- dimethoxyisoflavone	x	✓	x
220	Vogelin E	x	✓	x
221	Vogelin F	x	✓	x
222	Vogelin G	x	✓	x
223	Ficuisoflavone	x	✓	x
224	5'-Prenylpratensein	✓	✓	✓
225	3'-(3-Methylbut-2-enyl) biochanin	x	✓	x
226	Piscerythrinetin	x	✓	x
227	2'-Hydroxy-5'-methoxybiochanin A	x	✓	x
228	5'-Formylpratensein	x	✓	x
229	5,7-Dihydroxy-4'-methoxy-3'-(2,3- dihydroxy-3-methylbutyl) isoflavone	x	✓	x
230	Schliebenone A	x	✓	x
231	Schliebenone B	x	✓	x
232	Schliebenone C	x	✓	x
233	5,4'-Dimethoxy-3'-prenylbiochanin A	x	✓	x
234	Laburnetin	x	✓	x
235	Indicanine D	x	✓	x
236	Alpinumisoflavone	x	✓	✓
237	4-O-Methylalpinumisoflavone	x	✓	✓
238	5,4'-Dimethoxy alpinumisoflavone	x	✓	✓
239	Indicanine C	x	✓	x
240	Indicanine E	x	✓	x
241	Parvisoflavone B	x	✓	x
242	Warangalone (Scandenone)	x	✓	x
243	Auriculasin	✓	✓	x
244	Auriculatin		✓	x
245	Warangalone 4'-O-methyl ether	✓	✓	x
246	Robustone	✓	✓	x
247	M-Wi-2	x	✓	x
248	Erythgianin A	x	✓	x
249	4',7-Dihydroxy-2",2"- dimethylpyrano[5",6":5,6] isoflavone	x	✓	x
250	Osajin	x	✓	✓
251	Derrone	x	✓	✓
252	Isoderrone	x	✓	✓
253	Isochandalon	x	✓	
254	Erysubin A	x	✓	✓
255	Erysubin B	x	✓	✓

256	5,4'-Dihydroxy-2'-methoxy-8-(3,3-dimethylallyl)-2",2"-dimethylpyrano[5,6:6,7]isoflavone	x	✓	x
257	5,7,4'-Trihydroxy-6-(3",3"-dimethylallyloxitiranyl methyl)isoflavone	x	✓	✓
258	Erymildbraedin A	x	✓	x
259	5,4-Dihydroxy-8-(3,3-dimethylallyl)-2-methoxyisopropylfurano[4,5:6,7] isoflavone	✓	✓	x
260	Erymildbraedin B	x	✓	✓
261	Erysenegalensein D	x	✓	x
262	Erysenegalensein E	✓	✓	✓
263	Isoerysenegalensein E (Lysisteisoflavone)	x	✓	✓
264	Erysenegalensein F	x	✓	
265	Erysenegalensein G	x	✓	✓
266	Erysenegalensein K	✓	✓	x
267	Erysenegalensein L	x	✓	x
268	Erysenegalensein M	x	✓	x
269	Erysenegalensein N	x	✓	x
270	Erysenegalensein O	x	✓	x
271	5,7,4'-Trihydroxy-6-(2"-hydroxy3"-methylbut-3"enyl)isoflavone	x	✓	x
272	Erypoegin K	x	✓	✓
273	Senegalensin	x	✓	✓
274	Erythrinin C	x	✓	x
275	Hydroxyerythrinin C	x	✓	x
276	8-Prenylerithrinin C (Isosenegalensein) (Euchrenone b10)	x	✓	✓
277	Vogelin H	✓	✓	✓
278	Vogelin I	x	✓	✓
279	Eriotriochin	x	✓	✓
280	Erythraddison I	x	✓	x
281	Panchovillin	x	✓	x
282	7-Demethylrobustigenin	x	✓	x
283	7-O-Methylluteone	x	✓	x
284	2,3-Dehydrokievitone	✓	✓	x
285	8-Prenylluteone	x	✓	x
286	4'-Hydroxyisoflavone-7-O-β-D-glucopyranoside	x	✓	x
287	4'-Hydroxyisoflavone-7-O-α-L-rhamnosyl/ (1 → 6)-β-D-glucopyranoside	x	x	x
288	Derriscanoside B	x	x	x
Pterocarpans				
289	Demethylmedicarpin	✓	x	x
290	Sophorapterocarpan A (Homoedudiol)	✓	✓	x
291	Phaseollidin	✓	✓	x
292	1-Methoxy phaseollidin	x	✓	x
293	Erythrabyssin II	x	✓	x
294	1-Methoxyerythrabyssin II	x	✓	x
295	Calopocarpin	✓	✓	x
296	3,9-Dihydroxy-4-prenylpterocarpan	✓	✓	x
297	Eryvarin J	x	✓	x
298	Eryvarin K	x	✓	x

299	Erythribbyssin B	✓	x	x
300	Erythribbyssin C	x	x	x
301	Medicarpin	✓	x	x
302	Sandwicensin	✓	x	x
303	Erycristin	x	✓	x
304	3-Hydroxy-10-(3-hydroxy-3-methylbutyl)-9-methoxypterocarpan	x	x	x
305	3-Hydroxy-10-(2,3-dihydroxy-3-methylbutyl)-9-methoxypterocarpan	x	✓	x
306	Dolichins A	x	✓	x
307	Erybraedin A	x	✓	x
308	Erybraedin B	x	✓	x
309	Erybraedin C	x	✓	x
310	Erybraedin D	x	x	x
311	Erybraedin E	✓	x	x
312	Erybraedin F	x	x	x
313	Erystagallin C	✓	✓	x
314	Erylysin A	x	✓	x
315	Erylysin B	x	✓	x
316	Erylysin C	x	x	x
317	Shinpteroecarpin	x	x	x
318	Orientanol B	x	✓	x
319	Orientanol C	x	x	x
320	Neorautenol	✓	x	x
321	Isoneorautenol	✓	x	x
322	8-Methoxyneorautenol	✓	x	x
323	Phaseollin	x	✓	x
324	Folitenol	x	✓	x
325	Erythribbyssin L	✓	✓	x
326	Erythribbyssin D	✓	✓	x
327	Erythribbyssin M	✓	✓	x
328	Erysubin C	✓	x	x
329	Erysubin D		✓	x
330	Fuscacarpan A	✓	✓	x

6α-Hydroxypterocarpan

331	Cristacarpin (Erythrabissin I)	✓	x	x
332	Erystagallin A	x	✓	x
333	Demethylerystagallin A	x	✓	x
334	Erystagallin B	x	✓	x
335	Eryzerin E	x	✓	x
336	Fuscacarpan B	✓	x	x
337	Fuscacarpan C	✓	x	x
338	Erypoegin I	x	✓	x
339	Erypoegin J	x	x	x
340	Orientanol A	x	✓	x
341	Erysubin E	✓	✓	x
342	Eryvarin A	✓	x	x
343	Erythribbyssin A	x	✓	x
344	Hydroxycristacarpone	x	x	x

Pterocarpenes				
345	Erycristagallin	✓	✓	x
346	Eypoegin E	✓	✓	x
347	Eypoegin H	✓	✓	x
348	Eryvarin D	x	✓	x
349	Eryvarin E	x	✓	x
350	Eryvarin W	✓	✓	x
351	Erythribbyssin O	✓	✓	x
Coumestans				
352	Coumasterol	✓	✓	x
353	4-Hydroxycoumasterol	x	✓	x
354	Sigmoidin K	✓	✓	✓
355	Isosojagol	✓	✓	x
356	Erythribbyssin N	x	✓	x
3-Arylcoumarins				
357	Indicanine A	x	✓	x
358	Indicanine B	x	✓	x
359	Robustic acid	x	✓	x
Coumaronochromones				
360	Erysenegalensein J	x	x	x
2-Arylbenzofurans				
361	Latissimbenzofuran	✓	✓	x
362	2-(5'-Hydroxy-3"-methoxyphenyl)- 6-hydroxy-5-methoxybenzofuran	x	✓	x
363	Vignafuran	✓	✓	x
364	Eryvarin L	✓		x
365	Eryvarin P	x	✓	x
366	Eryvarin Q	x	✓	x
367	Eryvarin U	x	x	x
368	Glyinflanin H	x	✓	x
369	Burttinol D	✓	✓	x
370	Eypoegin F	x	✓	x
371	Erythribbyssin F	x	x	x
372	2'-O-Demethylbidwillol B	x	✓	x
373	Addisofuran A	✓	✓	x
374	Addisofuran B	✓	✓	x
375	Kanzonol U (Glabrocoumarone A)	x	✓	x
3-Aryl-2,3-dihydrobenzofurans				
376	Erythribbyssin H	✓	x	x
377	Eryvarin R	✓	x	x
Biflavonoids				
378	Bis-Sigmodiol	x	✓	x
Flavone				
379	Abyssinoside A	✓	✓	x
380	Abyssinoside B	✓	✓	x
381	Abyssinoside C	x	✓	x
382	Abyssinoside D	x	✓	x
383	Apigenin	✓	✓	x
384	Isochafftioside	✓	✓	x

385	5,7,4'-Trihydroxy-3'-methoxy-8-C-prenylflavone 7-O- β -D-glucopranosyl-(1→3)- α -L-arabinopyranoside	x	✓	x
386	Schaftoside	✓	✓	x
387	Vogeol	x	✓	x
Flavanone				
388	Abyssinone VII	x	✓	x
389	(2S)-5,7-Dihydroxy-3'-methoxy-2" ξ -(4"-hydroxyisopropyl)dihydrofuran[1",3":4',5']flavanone	✓	x	x
390	2(s)-5,7-Dihydroxy-3'-methoxy-[(5",6":3,4)-2",2"-dimethylpyrano-(5",6":5',6')]- (2", 2""-dimethylpyrano)flavanone	x	✓	x
391	2S)-5,7-Dihydroxy-3'-prenyl-2" ξ -(4"-hydroxyisopropyl)dihydrofuran[1",3":4',5'] flavanone	✓	✓	x
392	(2S)-5,7-Dihydroxy-3'-prenyl-2" ξ -(4"-hydroxy-isopropyl)-3"-hydroxydihydrofuran[1",3":4',5'] flavanone	✓	x	x
393	Eriotrinol	x	x	x
394	Erylatissin D	✓	x	x
395	Erylatissin E	✓	x	x
396	Erylatissin G	x	x	x
397	7-Hydroxy-2-[4-methoxy-3-(3-methylbut-2-enyl)phenyl]chroman-4-one	x	✓	x
398	2S-3'-(2-Hydroxy-3-methylbut-3-enyl)abyssinone II	x	✓	x
399	2S-3'-(2-Hydroxy-3-methylbut-3-enyl)licoflavone-4'-methyl ether	x	✓	x
400	Dihydroxyabyssin	x	x	x
401	4'-Hydroxy-6,3',5'-triprenylisoflavanone	✓	✓	✓
402	Mildbone	✓	✓	✓
403	8-(3"-Methylbut-2"-enyl)-7, 3', 4'-trihydroxyflavanone	✓	✓	✓
404	4'-Methoxyllicoflavone	✓	✓	✓
405	Obovatin	x	x	x
406	Sigmoidin B 4'-methyl ether	✓	✓	✓
407	Sigmoidin L	x	x	x
408	Bis-sigmodiol	✓	✓	✓
409	Sigmone	✓	✓	✓
410	Simotriol	✓	x	x
411	5,7,4'-Trihydroxy-3'-methoxyflavanone	✓	x	x
412	(2S)-5,7,3'-Trihydroxy-2'-prenyl-2" ξ -(4"-hydroxyisopropyl)-3"- hydroxy-dihydrofuran [1",3":4',5'] flavanone	✓	✓	x
413	(2S)-5,7,3'-Trihydroxy-2" ξ -(4"-hydroxyisopropyl)dihydrofuran [1",3":4',5']flavanone	✓	x	x
414	(2S)-5,7,3'-Trihydroxy-2" ξ -(4"-hydroxyisopropyl)-3"-hydroxydihydrofuran[1",3":4',5'] flavanone	✓	x	x
415	2(S)-5,6',7-Trihydroxy-5'-prenyl-[2",2"- (3", 4"-dihydroxy)-dimethylpyrano]- (5",6":3',4')flavanone	✓	x	x
Chalcone				
416	Mildbone	x	x	x
417	Trans-3,4,2',4'-tetrahydroxychalcone	x	x	x
Isoflavans				
418	7,4'-Dihydroxy-2',5'-dimethoxyisoflavan	✓	x	x
419	7,4'-Dihydroxy-2'-methoxy-3'-(3-methylbut-2-enyl)isoflavan (2'-O-Methylphaseollidininisoflavan)	x	✓	x

Isoflavanones				
420	⑧-2,3-Dihydro-7-demethylrobustigenin (⑧-5,7-Dihydroxy-2',4',5'- trimethoxyisoflavanone)	✓	x	x
421	5,3'-Dihydroxy-4'-methoxy-5'-(3-methyl-1,3-butadienyl)-2'',2''- dimethylpyrano[5,6:6,7] isoflavanone	x	✓	x
422	5,3'-Dihydroxy-5'-(3-hydroxy-3-methyl-1-butenyl)-4'-methoxy-2'',2''- dimethylpyrano[5,6:6,7]isoflavanone	x	x	x
423	Erybruccin A	✓	x	x
424	Erybruccin B	✓	✓	x
425	Erydroogmansin A	x	✓	x
426	Erynone	x	✓	x
427	Erysenegalensein B	x	x	x
428	Erysenegalensein C	x	✓	x
429	Kenusanone F	✓	x	x
430	sophoraisoflavanone A	x	x	x
Isoflavones				
431	Biochanin A	x	✓	x
432	Daidzein7-O-β-D-glucopyranoside	✓	✓	x
433	5,4'-Dihydroxy-8-(3"-methylbut-2"-enyl)-2""-(4""-hydroxy-4""-methylethyl)- furano-[4'',5'':6,7] isoflavone	✓	✓	x
434	5,4'-Dihydroxy-2"-hydroxyisopropylidihydrofuranone [4,5:7,8]-isoflavone	✓	✓	x
435	5,4'-Dihydroxy-(3",4"-dihydro-3"-hydroxy)-2",2"-dimethylpyrano[5",6":6,7]isoflavone (M-Wi-2)	✓	✓	x
436	5,4'-Di-O-methylalpinumisoflavone (Dimethylalpinumisoflavone)	x	✓	x
437	Erycaffra A	x	✓	x
438	Erycaffra B	x	✓	x
439	Erycaffra C	x	✓	x
440	Erydroogmansin B	x	✓	x
441	Erylassitin F	x	✓	x
442	Erysacleuxin A	x	✓	x
443	Erysacleuxin B	x	✓	x
444	Erythraddison A	x	✓	x
445	Erythrinin D	x	✓	✓
446	Erythrinin E	✓	✓	✓
447	Erythrinin F	✓	✓	x
448	Erythrinin G	✓	✓	✓
449	Erythrinin H	x	✓	x
450	Erythrivarone A	x	✓	x
451	Erythrivarone B	x	✓	x
452	Eryvarin F	x	✓	x
453	Eryvarin G	x	✓	x
454	Eryvarin X	x	✓	x
455	Fleminphilippin B	x	✓	x
456	Glycyrrhizoflavone	x	✓	x
457	Isosenegalensis	x	✓	✓
458	3'-isoprenylgenistein	x	✓	x
459	Luteone	x	✓	x
460	3'-O-Methylprantensein	x	✓	x
461	Olibergin A	x	✓	x

462	4',5,7-Trihydroxy-8-methylisoflavone	x	✓	x
463	4',5,7-Trihydroxy-8-prenylisoflavone	x	✓	x
464	Ulexone A	✓	✓	✓
465	Semilicoisoflavone B	x	✓	x
466	Vogeliiol	x	✓	x
Pterocarpans				
467	2-(γ, γ-dimethylallyl)-6a-hydroxyphaseollidin	x	✓	x
468	3,9-Dihydroxypterocarp-6a-ene	✓	✓	x
469	Erythbidin D	✓	✓	x
470	Erythrabissin II	x	✓	x
471	Gangetinin	x		x
472	6α-Hydroxyphaseollidin	x	✓	x
473	Schliebenin A	x	✓	x

Table S2. Pharmacokinetics properties of selected flavonoids from genus *Erythrina*

	ADMET Parameters	Compounds						
		2	5	8	135	136	150	157
Absorption	Water solubility (log mol/L)	-3.201	-4.364	-4.132	-5.206	-5.172	-5.967	-5.062
	Caco-2 permeability (log Papp in 10 ⁻⁶ cm/s)	0.153	1.118	1.118	1.062	1.061	0.706	1.234
	Intestinal Absorption (% Absorbed)	78.997	99.803	97.916	95.53	95.078	95.831	95.971
	P-glycoprotein substrate	No	No	No	No	No	No	No
	p-glycoprotein I inhibitor	Yes	Yes	Yes	Yes	Yes	Yes	No
	p-glycoprotein II inhibitor	Yes	Yes	Yes	No	No	No	Yes
Distribution	VDss (log L/kg)	0.138	0.625	0.085	0.515	0.481	0.181	0.124
	Fraction unbound	0.156	0.196	0.229	0.023	0.023	0	0.05
	BBB permeability (log BB)	-1.134	0.308	-0.776	0.27	0.286	-0.236	-0.048
	CNS permeability (log PS)	-2.372	-1.85	-2.259	-1.797	-1.787	-2.1	-1.925
Metabolism	CYP2D6 substrate	No	No	No	No	No	No	No
	CYP3A4 substrate	No	Yes	Yes	Yes	Yes	Yes	No
	CYP1A2 inhibitor	Yes	Yes	Yes	Yes	Yes	Yes	No
	CYP2C19 inhibitor	No	Yes	Yes	Yes	Yes	Yes	No
	CYP2C9 inhibitor	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CYP2D6 inhibitor	No	No	No	No	No	No	No
	CYP3A4 inhibitor	Yes	Yes	No	No	Yes	No	Yes
Excretion	Total clearance (log mL/min/Kg)	0.536	0.695	0.699	0.205	0.329	0.306	0.225
	Renal OCT2 substrate	No	Yes	Yes	Yes	Yes	No	No

Table S2. (*Continued*)

