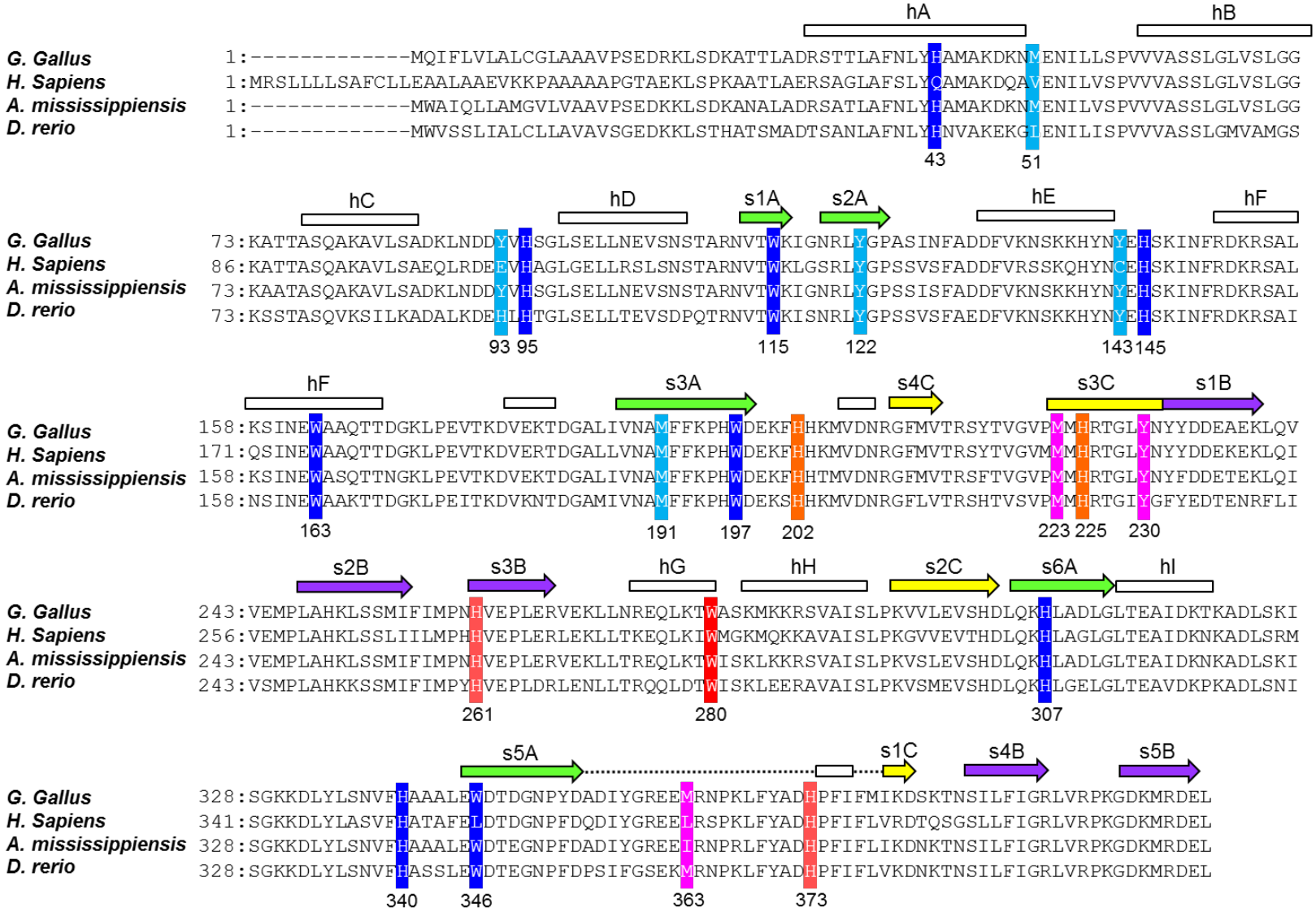
Figure S1


hA
hB
G. Gallus 1:----------MQIFLVLALCGLAAAVPSEDRKLSDKATTLADRSTTLAFNLYHAMAKDKNMENILLSPVVVASSLGLVSLGG
H. Sapiens 1:MRSLLLLSAFCLLEAALAAEVKKPAAAAAPGTAEKLSPKAATLAERSAGLAFSLYQAMAKDQAVENILVSPVVVASSLGLVSLGG
A. mississippiensis 1:----------MWAIQLLAMGVLVAAVPSEDKKLSDKANALADRSATLAFNLYHAMAKDKNMENILVSPVVVASSLGLVSLGG
D. rerio 1:----------MWVSSLIALCLLAVAVSGEDKKLSTHATSMADTSANLAFNLYHNVAKEKGIENILISPVVVASSLGMVAMGS
43
51
hC
hD
s1A
s2A
hE
hF
G. Gallus 73:KATTASQAKAVLSADKLNDDYVHSGLSELLNEVSNSTARNVTWKIGNRLYGPASINFADDFVKNSKKHYNYEHSKINFRDKRSAL
H. Sapiens 86:KATTASQAKAVLSAEQLRDEEVHAGLGELLRSLSNSTARNVTWKLGSRLYGPSSVSFADDFVRSSKQHYNCEHSKINFRDKRSAL
A. mississippiensis 73:KAATASQAKAVLSADKLNDDYVHSGLSELLNEVSNSTARNVTWKIGNRLYGPSSISFADDFVKNSKKHYNYEHSKINFRDKRSAL
D. rerio 73:KSSTASQVKSILKADALKDEHLHTGLSELLTEVSDPQTRNVTWKISNRLYGPSSVSFAEDFVKNSKKHYNYEHSKINFRDKRSAI
93 95
115
122
143 145
hF
s3A
s4C
s3C
s1B
G. Gallus 158:KSINEWAAQTTDGKLPEVTKDVEKTDGALIVNAMFFKPHWDEKFHHKMVDNRGFMVTRSYTVGVPMMHRTGLYNYYDDEAEKLQV
H. Sapiens 171:QSINEWAAQTTDGKLPEVTKDVERTDGALLVNAMFFKPHWDEKFHHKMVDNRGFMVTRSYTVGVMMMHRTGLYNYYDDEKEKLQI
A. mississippiensis 158:KSINEWASQTTNGKLPEVTKDVEKTDGALIVNAMFFKPHWDEKFHHTMVDNRGFMVTRSFTVGVPMMHRTGLYNYFDDETEKLQI
D. rerio 158:NSINEWAAKTTDGKLPEITKDVKNTDGAMIVNAMFFKPHWDEKSHHKMVDNRGFLVTRSHTVSVPMMHRTGIYGFYEDTENRFLI
163
191
197
202
223 225
230
s2B
s3B
hG
hH
s2C
s6A
hI
G. Gallus 243:VEMPLAHKLSSMIFIMPNHVEPLERVEKLLNREQLKTWASKMKKRSVAISLPKVVLEVSHDLQKHLADLGLTEAIDKTKADLSKI
H. Sapiens 256:VEMPLAHKLSSLIILMPHHVEPLERLEKLLTKEQLKIWMGKMQKKAVAISLPKGVVEVTHDLQKHLAGLGLTEAIDKNKADLSRM
A. mississippiensis 243:VEMPLAHKLSSMIFIMPNHVEPLERVEKLLTREQLKTWISKLKKRSVAISLPKVSLEVSHDLQKHLADLGLTEAIDKNKADLSKI
D. rerio 243:VSMPLAHKKSSMIFIMPYHVEPLDRLENLLTRQQLDTWISKLEERAVAISLPKVSMEVSHDLQKHLGELGLTEAVDKPKADLSNI
261
280
307
s5A
s1C
s4B
s5B
G. Gallus 328:SGKKDLYLSNVFHAAALEWDTDGNPYDADIYGREEMRNPKLFYADHPFIFMIKDSKTNSILFIGRLVRPKGDKMRDEL
H. Sapiens 341:SGKKDLYLASVFHATAFELDTDGNPFDQDIYGREELRSPKLFYADHPFIFLVRDTQSGSLLFIGRLVRPKGDKMRDEL
A. mississippiensis 328:SGKKDLYLSNVFHAAALEWDTEGNPFDADIYGREEIRNPRLFYADHPFIFLIKDNKTNSILFIGRLVRPKGDKMRDEL
D. rerio 328:SGKKDLYLSNVFHASSLEWDTEGNPFDPSIFGSEKMRNPKLFYADHPFIFLVKDNKTNSILFIGRLVRPKGDKMRDEL
340
346
363
373