

Supplementary Material

Luminescence of *Cypridina* Luciferin in the Presence of Human Plasma Alpha 1-Acid Glycoprotein

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BAD08210. 1_CLase1	MKTLILAVALVYCATVHCQD-CPYEPDPPN---TVPTSCEAKEGECIDSS 46
AAA30332. 1_CLase2	MKIIILSVILAYCVDNQCQACPVAEPPSSTPTVPTSCEAKEGECIDTR 50
CAA26397. 1_hAGP	-----
BAD08210. 1_CLase1	CGTCTRDILSDGLCENKPGKTCRMCQYVIECRVEAAGWFRFTFYGKRFQF 96
AAA30332. 1_CLase2	CATCKRDILSDGLCENKPGKTCRMCQYVIECRVEAAGYFRFTFYGKRNF 100
CAA26397. 1_hAGP	-----
BAD08210. 1_CLase1	QEPGTYVLGQGTKGGDWKVSITLENLDGTKGAVLTKRLEVAGDIIDIAQ 146
AAA30332. 1_CLase2	QEPGKYVLARGTKGGDWSVTLTMENLDGQKGAVLTKTLEVAGDVIDITQ 150
CAA26397. 1_hAGP	-----
BAD08210. 1_CLase1	ATENPITVNGGADPIIANPYTIGEVTVAVVEMPGFNITVIEFFKLIVIDI 196
AAA30332. 1_CLase2	ATADPITVNGGADPVIANPFTIGEVTVAVVEIPGFNITVIEFFKLIVIDI 200
CAA26397. 1_hAGP	-----MALSWVLTVLSLLPLEAQI 20
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BAD08210. 1_CLase1	LGGRSVRIAPDTANKGMISGLCGDLKMMEDTFTSDPEQLAIQPKINQEF 246
AAA30332. 1_CLase2	LGGRSVRIAPDTANKGLISGICGNLEMDADFTTDADQLAIQPNINKEF 250
CAA26397. 1_hAGP	P--LCANLVPVPITNATLDQITG-KWFIASAFT-----NEEY 55
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BAD08210. 1_CLase1	DGCPLYGNPDDVAYCKGLLEPYKDSRNPINFYYYTISCAFAFCMGGER 296
AAA30332. 1_CLase2	DGCPFYGNPSDIEYCKGLMEPYRAVCRRNINFYYYTISCAFAFCMGGEER 300
CAA26397. 1_hAGP	N-----KSVQEIQATFEYFTP-----71
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BAD08210. 1_CLase1	ASHVLLDYRETCAAPETRGTGCVLSGHTFYDTFDKARYQFGGPCKEILMAA 346
AAA30332. 1_CLase2	AKHVLFDYVETCAAPETRGTGCVLSGHTFYDTFDKARYQFGGPCKEILMAA 350
CAA26397. 1_hAGP	-----NKTEDTIFLR-----EYQTRQDQCINYNT 94
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BAD08210. 1_CLase1	DCFWNTWDVKVSHRNVDSYTEVEKVRIRKQSTVVELIVDGKQILVGG EAV 396
AAA30332. 1_CLase2	DCYWNTWDVKVSHRDVESYTEVEKVTIRKQSTVVDLIVDGKQVKVGGVDV 400
CAA26397. 1_hAGP	TYLNVQRENGTISRYVGGQEHFAHLLILRDTKTYMLAFDVNDEKNWGLSV 144
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BAD08210. 1_CLase1	SIPYSSQNTSIYWQGDILTTAILPEALVVKFNFKQLLVHIRDPFDGKT 446
AAA30332. 1_CLase2	SIPYSSNTSIYWQGDILTTAILPEALVVKFNFKQLLVHIRDPFDGKT 450
CAA26397. 1_hAGP	YADKPETTKEQLGEFYEALDCLRIPKSDVYTDWKK-----180
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BAD08210. 1_CLase1	CGICGNYNQDFSDDSFDAEGACDLTPNPPGCTEEQKPEAERLCNSLFAGQ 496
AAA30332. 1_CLase2	CGICGNYNQDSTDDFFDAEGACALTPNPPGCTEEQKPEAERLCNNLFD-- 498
CAA26397. 1_hAGP	-DKCEPLEKQHEKERKQEEGES-----201
	: * : : : : : * :
BAD08210. 1_CLase1	SDLQKCNVCHKPDPRVERCMYCYCLRGQQGFCDAWEFKKECYIKHGDTL 546
AAA30332. 1_CLase2	SSIDEKCNVCKPDRIARCMYCYCLRGQQGFCDAWEFKKECYIKHGDTL 548
CAA26397. 1_hAGP	-----
BAD08210. 1_CLase1	EVPDECK 553
AAA30332. 1_CLase2	EVPPECQ 555
CAA26397. 1_hAGP	-----

Figure S1. Overall alignment of hAGP with Clases. CLase1 and CLase2 indicate CLase from *C. noctiluca* and CLase from *V. hilgendorffii*, respectively. Gaps are represented as dashes (-). Numbers in parentheses indicate the positions of last amino acid residues. Gray-shaded characters indicate amino acids involved in the drug-binding ability of hAGP [34]. An asterisk (*) indicate identical amino acid residues. A colon (:) indicate sites belonging to group exhibiting strong similarity. A period (.) indicate sites belonging to a group exhibiting weak similarity. The site similarity followed the criteria of ClustalW [51].