

Figure 1

		1		70
ENO4_HUMAN	(1)	MEEEGGGRRSCGTTRELQKIKQJAMEYYRENDVFRKLEELLNSTFYLQPADVYSHLXANCFSKLAKPPTIC		
ENOA_HUMAN	(1)	-----	MSIL	
ENOB_HUMAN	(1)	-----	MAMQ	
ENOG_HUMAN	(1)	-----	MSIE	
Consensus	(1)		MSI	
		71		140
ENO4_HUMAN	(71)	KIVGKDVLDGLGLFTLQVDIFCTIQNFFKNVCSVVISTHFEVHENALPELAKAEAEERASAVSTAVQWVN		
ENOA_HUMAN	(5)	KIHAREIFDSRGNPTVEVDLFTSGKLFRAAVPSGASTGIYEALRLDNDTRYMGKG-----VSKAVEHIN		
ENOB_HUMAN	(5)	KIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALRLDGDGGRYLKGS-----VLKAVENIN		
ENOG_HUMAN	(5)	KIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALRLDGDGGRYLKGS-----VLKAVDHIN		
Consensus	(71)	KIFAREILDSRGNPTVEVDLFTAKGLFRAAVPSGASTGIYEALRLDGDGGRYLKGS	VSKAVEHIN	
		141		210
ENO4_HUMAN	(141)	STITHELQGMAPSDDAEVDHLLRIFFASKVQEDGKRKELEKSLEYSTVPTFLFPVFPFPPFPFPPPTKKKGQ		
ENOA_HUMAN	(71)	ETIAPALVSEKLN-VTEQEKIDKLMIEGDGTENKSK-----		
ENOB_HUMAN	(71)	NTLGFALLQKKLS-VVDQEKVDFKFMIELDGTENKSK-----		
ENOG_HUMAN	(71)	STIAPALISSGLS-VVEQEKLDNLMLELDGTENKSK-----		
Consensus	(141)	STIAPALISKKL3 VVEQEKLDKLMIELDGTENKSK		
		211		280
ENO4_HUMAN	(211)	KPGRKDTITEKSTIAPAEPEVPEVLSSGSAIGAVSLAVAKACAMLLNKPLYLNIALLEHNQEQPTLSMELL		
ENOA_HUMAN	(106)	-----FGANAILGVSLAVCKAGAVESGVFLYRHIADLAGNSE-----VILEVP		
ENOB_HUMAN	(106)	-----FGANAILGVSLAVCKAGAAESGVFLYRHIADLAGNPD-----LILEVP		
ENOG_HUMAN	(106)	-----FGANAILGVSLAVCKAGAAERELPLYRHIADLAGNSD-----LILEVP		
Consensus	(211)	FGANAILGVSLAVCKAGAAESGVFLYRHIADLAGNSD	LILEVP	
		281		350
ENO4_HUMAN	(281)	MVSLVSCGKSSSGKLNLMKEVICIFHPELTTFQGVEMLMEMQKHINKIEMMFPSPFKAETKKGHDSGSR		
ENOA_HUMAN	(149)	AFNVINGG-SHAGNKLAMQEFMILPVGAANFBEAMEIGAIEVYHHLKNVIEKRYG---KDATNVGDEGGFA		
ENOB_HUMAN	(149)	AFNVINGG-SHAGNKLAMQEFMILPVGAASFKEAMRIGAIEVYHHLKGVIKAKYG---KDATNVGDEGGFA		
ENOG_HUMAN	(149)	AFNVINGG-SHAGNKLAMQEFMILPVGAESFEDAMRLGAIEVYHTLKGVIKDKYG---KDATNVGDEGGFA		
Consensus	(291)	AFNVINGG SHAGNKLAMQEFMILPVGAASFKEAMRIGAIEVYHHLKGVIKDKYG	KDATNVGDEGGFA	
		351		420
ENO4_HUMAN	(351)	GQQQITGKMSHLGCLTINCDSIEQPLLLIQETCANLGLELSTNLHLATNCAGHELMIDYNKGYEVINGTY		
ENOA_HUMAN	(215)	PNILENKEGLELLKTAIGKAGYTDKVVIGMDVAASEFFRS-----GRYDLDFKS---PDDPSRY		
ENOB_HUMAN	(215)	PNILENNEALELLKTAIQAGYFDKVVIGMDVAASEFYRN-----GRYDLDFKS---PDDPARH		
ENOG_HUMAN	(215)	PNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRD-----GRYDLDFKS---PTDPSRY		
Consensus	(351)	PNILEN EALELLKTAINKAGYTDKVVIGMDVAASEFYR	GRYDLDFKS	PDDPSRY
		421		490
ENO4_HUMAN	(421)	ENAAEMVDLYVDLINKYPSIALIDPFKEDSEQWDSIYHALGSRCTIAGTAS---KSISKLEQGNIS		
ENOA_HUMAN	(271)	ISPDQLADLYKSFIDYF-VVSIEDPFDQDDWGANQKFTASAGIQVVGDDLTVTNPKRIAKAVNE-----		
ENOB_HUMAN	(271)	ITGERLGELYKSFIDYF-VVSIEDPFDQDDWATWTFSLSGVNIQIVGDDLTVTNPKRIAQAVEK-----		
ENOG_HUMAN	(271)	ITGDQLGALYQDFVRDYF-VVSIEDPFDQDDWAANSKFTANVGIQIVGDDLTVTNPKRIERAVEE-----		
Consensus	(421)	ITGDQLGDLKYSFIKDYF VVSIEDPFDQDDWAANSFTAAVGIQIVGDDLTVTNPKRIAKAVEE		
		491		560
ENO4_HUMAN	(489)	PKSNGLIKHNTQTMSDLVEITNLIDSKKHITVFGSTEGESSDDSLVDLAVGLQVRPFIKLGGLSPGERV		
ENOA_HUMAN	(335)	KSCNCLLLKVNQIGSVTESIQACKLAQSNQWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCSRERL		
ENOB_HUMAN	(335)	KACNCLLLKVNQIGSVTESIQACKLAQSNQWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCSRERL		
ENOG_HUMAN	(335)	KACNCLLLKVNQIGSVTEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCSRERL		
Consensus	(491)	KACNCLLLKVNQIGSVTESIQACKLAQSNQWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCSRERL		
		561		630
ENO4_HUMAN	(559)	TKYNRLITIEELVQNGTIGFKEERTFFYFNEEAEEAAEALEAAAAREPLVPTFTQGVESAEETGAASSG		
ENOA_HUMAN	(405)	AKYNQLLRIZIEELGSKAKFAGRNFFNPLAK-----		
ENOB_HUMAN	(405)	AKYNQLMRIZIEALGKAIKAFGRKFRNPKAK-----		
ENOG_HUMAN	(405)	AKYNQLMRIZIEELGSEARFAGHNFFNFSVL-----		
Consensus	(561)	AKYNQLLRIZIEELGSKAKFAGRNFFNPK AK		

Figure 2

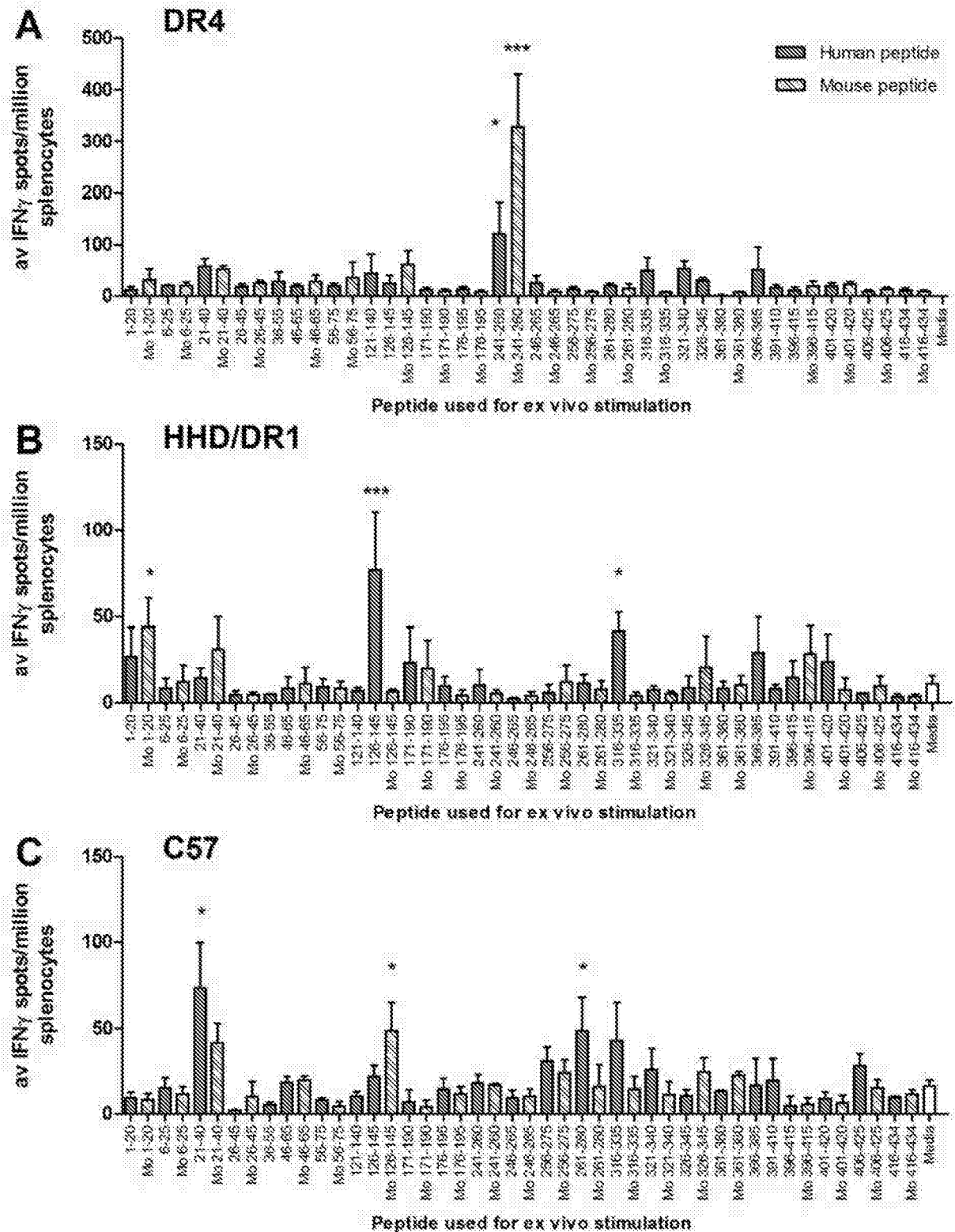


Figure 3

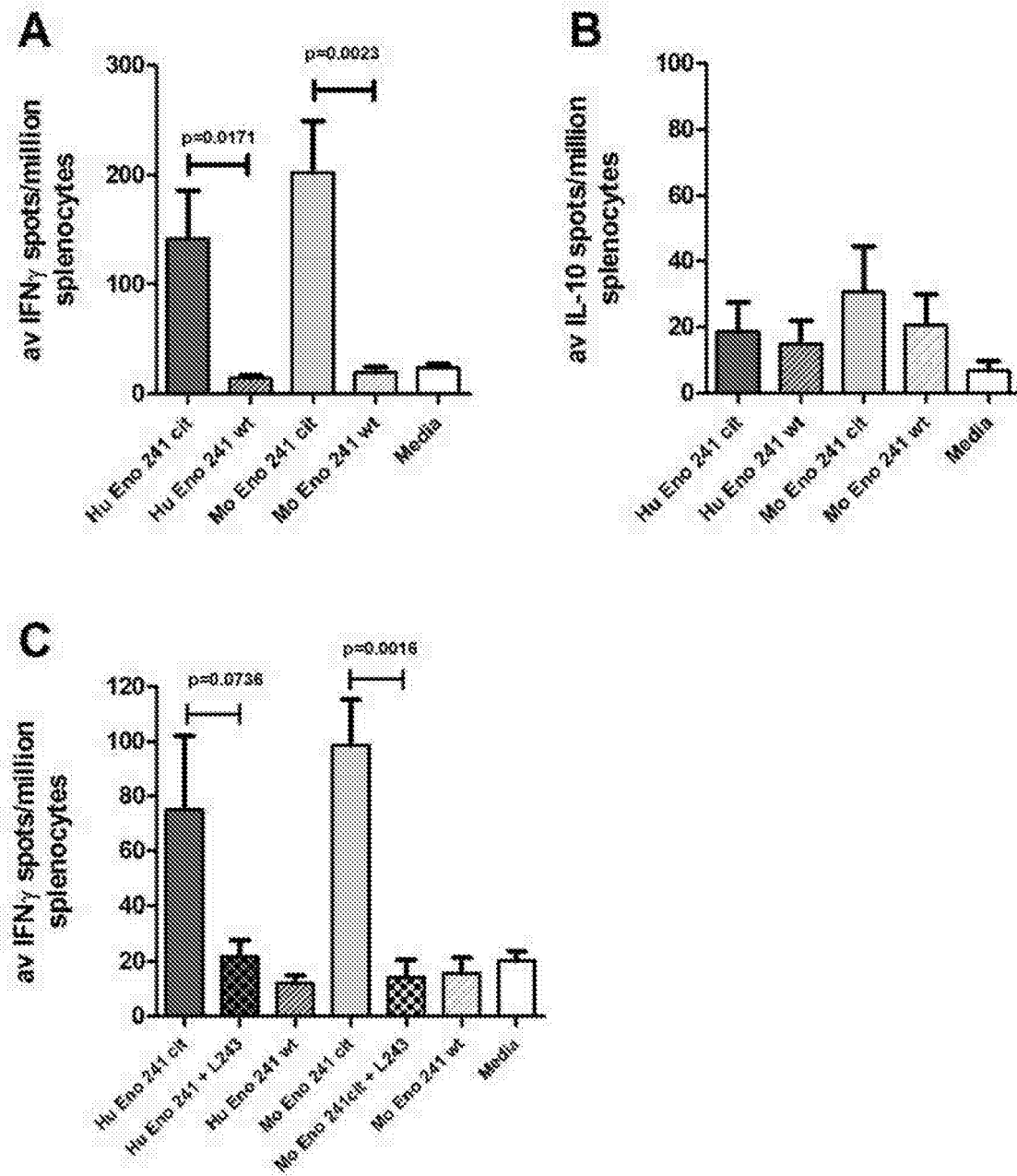


Figure 4

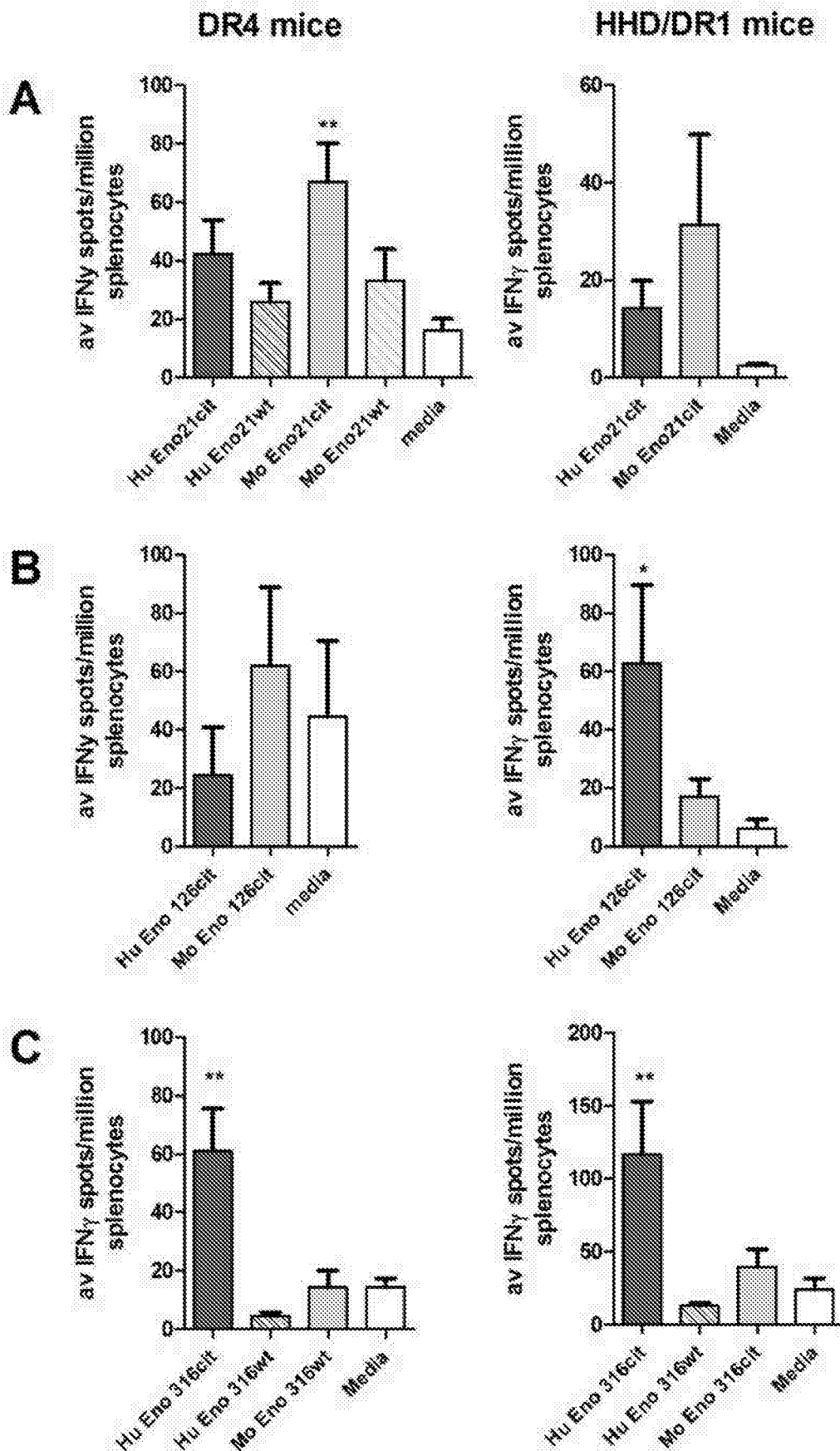


Figure 5

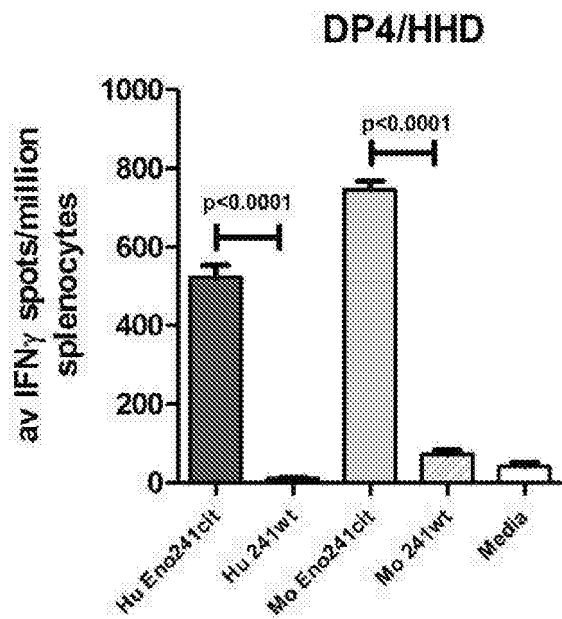


Figure 6

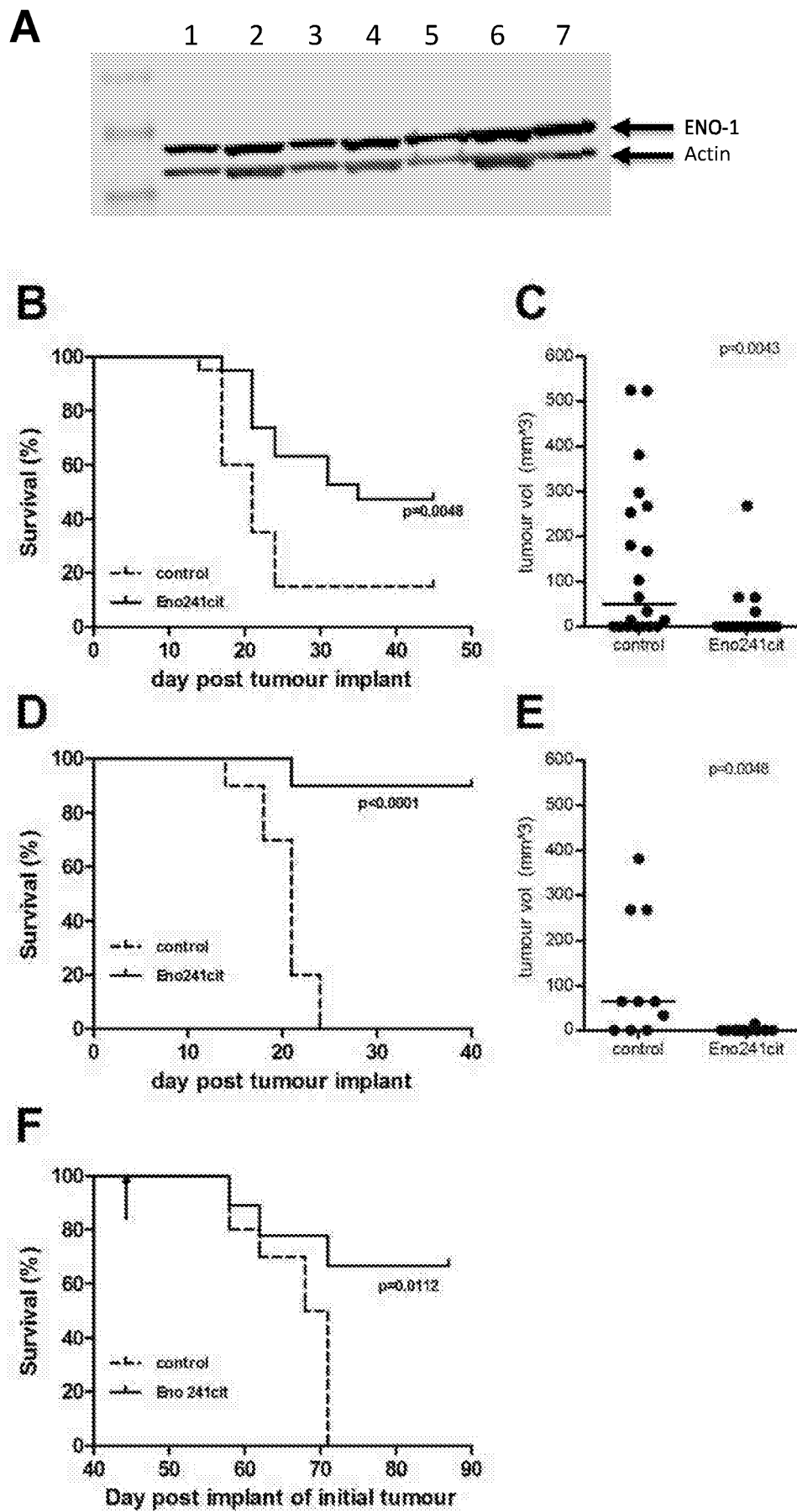


Figure 7

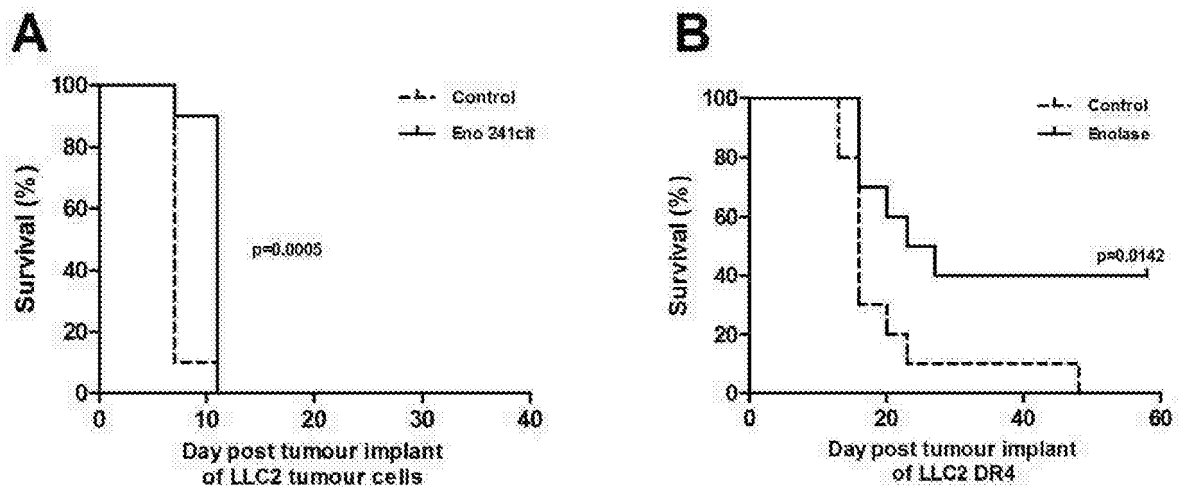


Figure 8

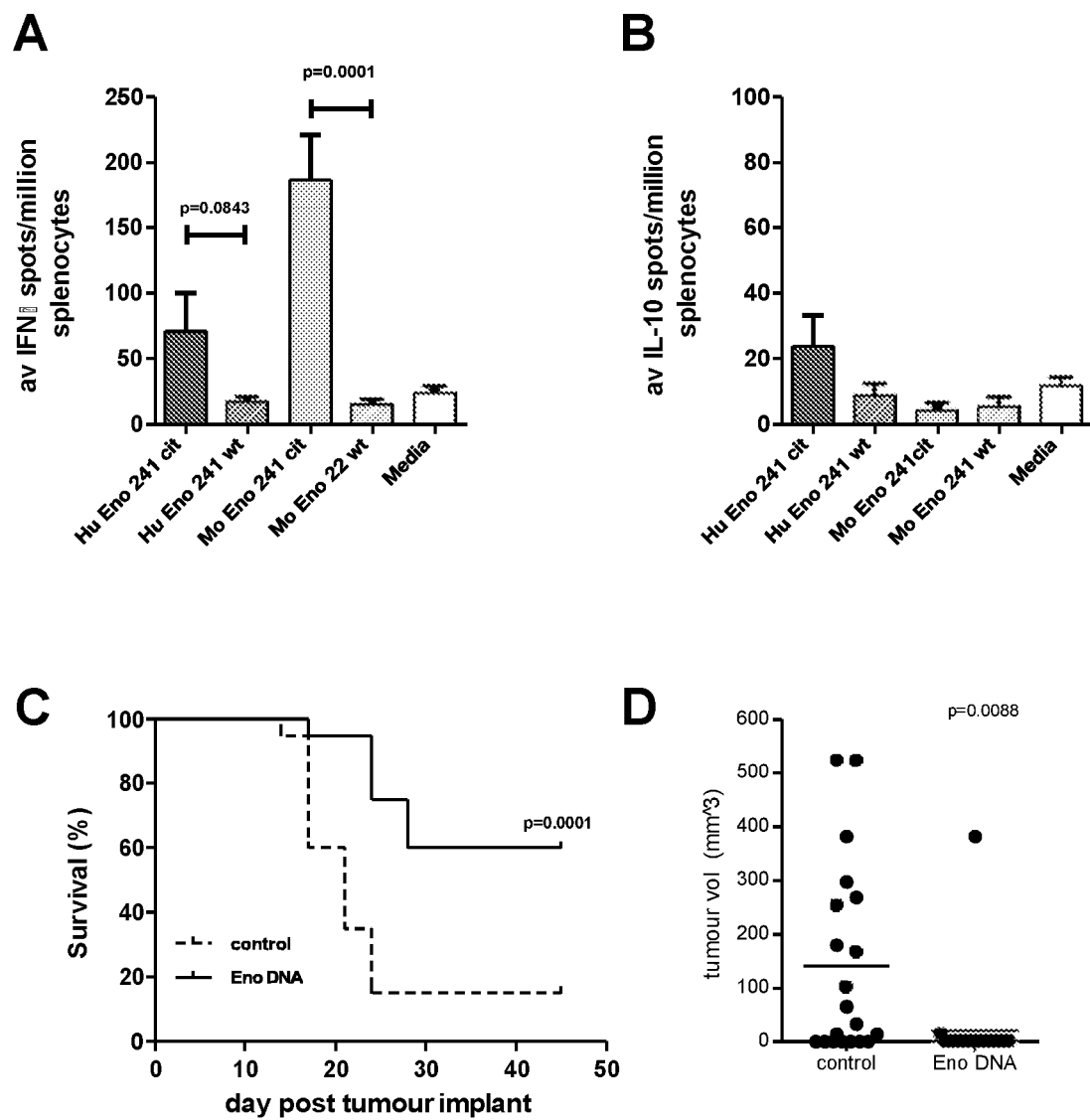
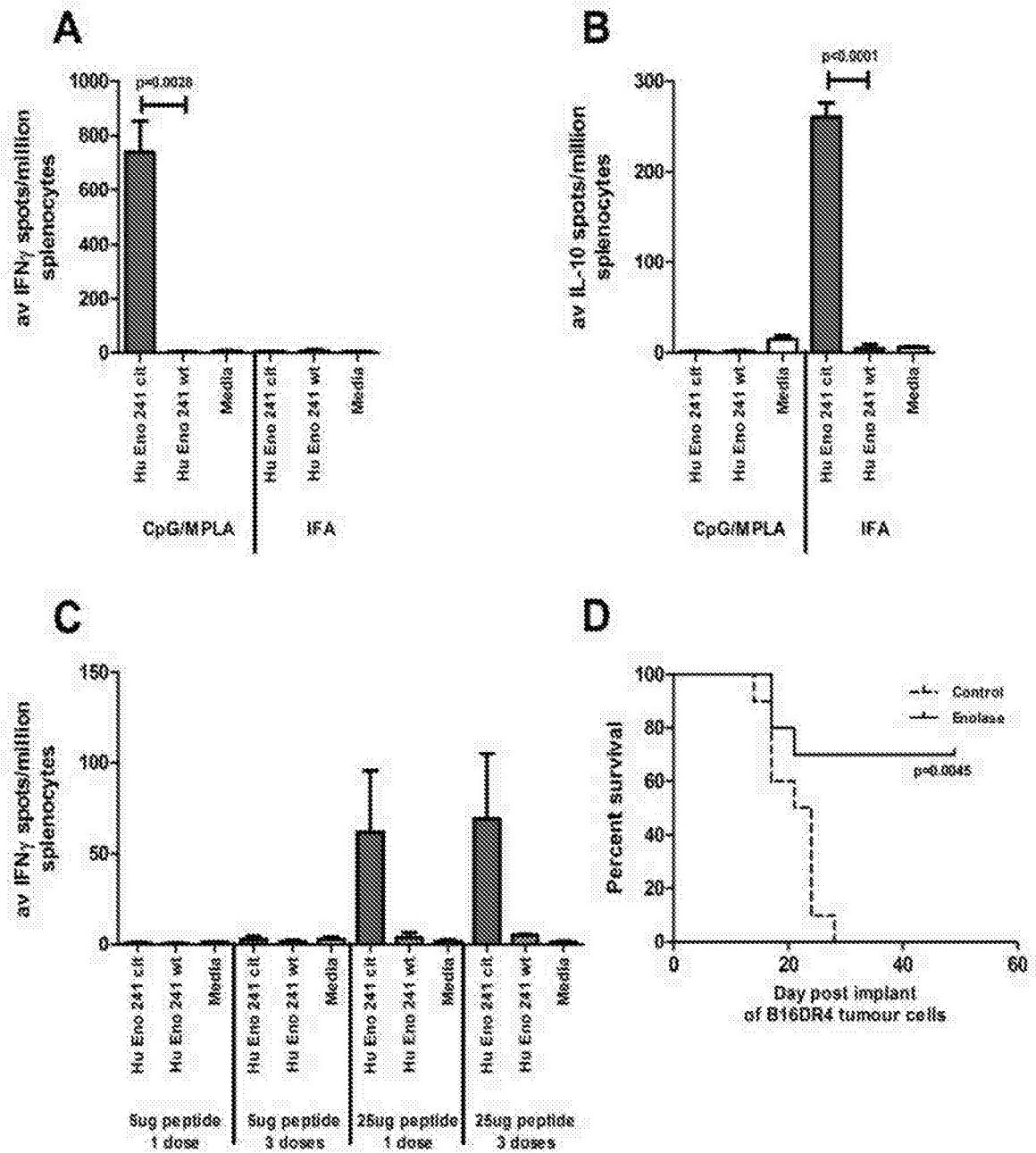
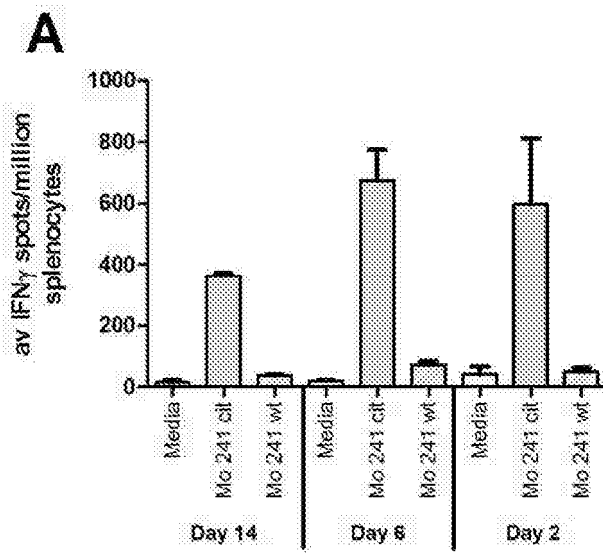


Figure 9



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Figure 10



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Figure 11

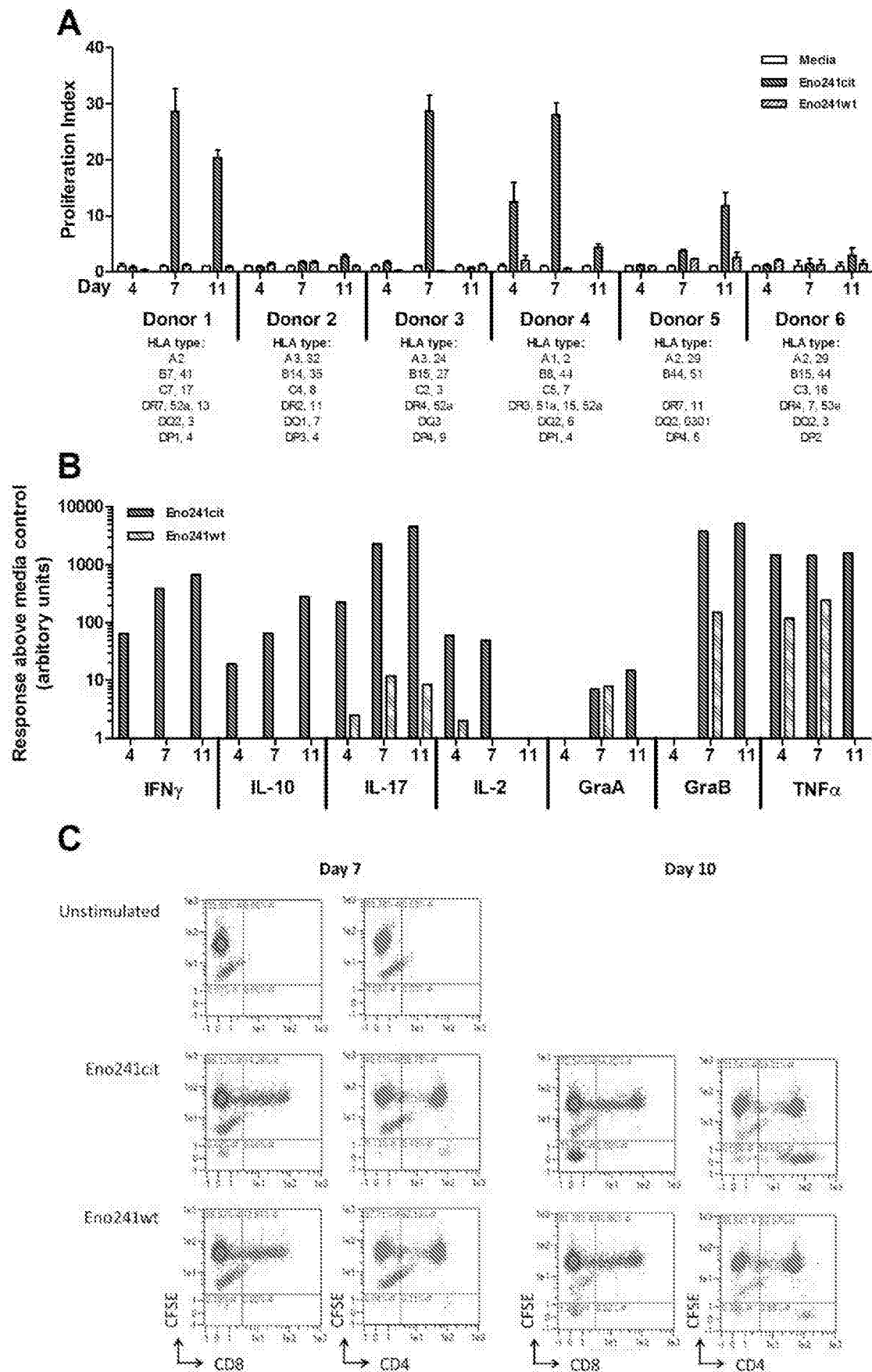


Figure 12 – Homology of Human Alpha Enolase with other species

		3	70
HNOA_HUMAN	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_MOUSE	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_RAT	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_BOVIN	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_PIG	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_HORSE	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_CHICKEN	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_FELIS	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_CANINE	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_RABBIT	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
HNOA_SHEEP	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
Consensus	(1)	MSLLKHAREIFDSEGNPTVEVDLYTAKGLFRAAVPSSASTGTYEALRLRNDKTFYMKGVSKVAVHIN	
		71	140
HNOA_HUMAN	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_MOUSE	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_RAT	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_BOVIN	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_PIG	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_HORSE	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_CHICKEN	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_FELIS	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_CANINE	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_RABBIT	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
HNOA_SHEEP	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
Consensus	(71)	HTAALVSKLVVVEQSKIDKLMIMDGTENKSEFGAAILGVSLAVCKKAGVKEGVPLVTHIADLAGN	
		141	210
HNOA_HUMAN	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_MOUSE	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_RAT	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_BOVIN	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_PIG	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_HORSE	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_CHICKEN	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_FELIS	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_CANINE	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_RABBIT	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
HNOA_SHEEP	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
Consensus	(141)	SEVILPVAFVWVINGSHAGNLA-MQEFMILPVGAATFEAMR-IGAEVYHNLKN-----VINEKYGK	
		211	280
HNOA_HUMAN	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_MOUSE	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_RAT	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_BOVIN	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_PIG	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_HORSE	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_CHICKEN	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_FELIS	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_CANINE	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_RABBIT	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
HNOA_SHEEP	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
Consensus	(203)	QKTVGDSGGFAFNILENKA-----LELLKNAIGKAGYTDVYVIGMVAASSEFFPSGKYLDLFFESDDP	
		281	350
HNOA_HUMAN	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_MOUSE	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_RAT	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_BOVIN	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_PIG	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_HORSE	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_CHICKEN	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_FELIS	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_CANINE	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_RABBIT	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
HNOA_SHEEP	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
Consensus	(268)	SEYITTEQLADLYHFFIKDYFVVSIEDPFDQDQWAGQKFTASAGIQVVGDLTVTHNPKIAKAVSEKSC	
		351	420
HNOA_HUMAN	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_MOUSE	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_RAT	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_BOVIN	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_PIG	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_HORSE	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_CHICKEN	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_FELIS	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_CANINE	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_RABBIT	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
HNOA_SHEEP	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
Consensus	(338)	NCLLVNQIGSVTSELQACKLAQSGNMGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSEERLAKY	
		421	490
HNOA_HUMAN	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_MOUSE	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_RAT	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_BOVIN	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_PIG	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_HORSE	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_CHICKEN	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_FELIS	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_CANINE	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_RABBIT	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
HNOA_SHEEP	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	
Consensus	(408)	NQLLIEEELGSKAKFAGSFFNPLAK-----	

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SUBSTITUTE SHEET (RULE 26)

Figure 13 – homology of Human Beta Enolase with other species

	1	70
ENOB_HUMAN	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVENIN	
ENOB_MOUSE	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKARYLGKGVLKAVEHIN	
ENOB_RAT	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
ENOB_BOVINE	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
ENOB_PIG	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
ENOB_HORSE	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
ENOB_CHICKEN	(1) MSIQKIHAREILDSRGEPTVEVDLHTAKGHFRAAVPSGASTGIHEALEPRDGDGKRRFLGKGVLKAVEHIN	
ENOB_FELIS	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
ENOB_CANINE	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
ENOB_RABBIT	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
ENOB_SHEEP	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
Consensus	(1) MAMQKIFAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALERDGDGKRYLGKGVLKAVEHIN	
	71	140
ENOB_HUMAN	(71) NTLGPALLQKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_MOUSE	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_RAT	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_BOVINE	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_PIG	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_HORSE	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_CHICKEN	(71) KTIGPALIEKKISVVEQEKIDKVMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_FELIS	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_CANINE	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_RABBIT	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
ENOB_SHEEP	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
Consensus	(71) KTLGPALLEKKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPPLYRHIADLAGN	
	141	210
ENOB_HUMAN	(141) PDLILPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_MOUSE	(141) PDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_RAT	(141) PDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_BOVINE	(141) PELILPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_PIG	(141) PDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_HORSE	(141) PDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_CHICKEN	(141) TELILPVPAFNVINGGSHAGNKLAMQEFMVLPGAASFHDAMRVGAEVYHSLKGVIKAKYKGDATNVGGE	
ENOB_FELIS	(141) PDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_CANINE	(141) PDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_RABBIT	(141) HDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
ENOB_SHEEP	(141) PELILPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
Consensus	(141) PDLVLPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYKGDATNVGDE	
	211	280
ENOB_HUMAN	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHITGEKLGELY	
ENOB_MOUSE	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHISGEKLGELY	
ENOB_RAT	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHISGEKLGELY	
ENOB_BOVINE	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHISGEKLGELY	
ENOB_PIG	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPSRHTGEKLGELY	
ENOB_HORSE	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHITGEKLGELY	
ENOB_CHICKEN	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPHTKRYITGEQLGELY	
ENOB_FELIS	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHITGEKLGELY	
ENOB_CANINE	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHITGEKLGELY	
ENOB_RABBIT	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHITGQKLGELY	
ENOB_SHEEP	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHISGEKLGELY	
Consensus	(211) GGFAPNILENNEALELLKTAIQAAGYPDKVVGMDVAASEFYRNGKYDLDFKSPDDPARHITGEKLGELY	
	281	350
ENOB_HUMAN	(281) KSFINKYPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_MOUSE	(281) KNFIQNPVVSIEDPFDQDDWATWTSFLSGVDIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_RAT	(281) KSFINKYPVVSIEDPFDQDDWATWTSFLSGVDIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_BOVINE	(281) KNFIKNPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_PIG	(281) KSFINKYPVVSIEDPFDQDDWKTWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_HORSE	(281) KNFIKNPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVQKKACNCLLLKVNQIGSV	
ENOB_CHICKEN	(281) RGFIKDPVVSIEDPFDQDDWEAWKRFVHVDIQVVGDDLTVTNPKRIAQAHGAEQACNCLLLKVNQIGSV	
ENOB_FELIS	(281) KNFIKNPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_CANINE	(281) KSFINKYPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_RABBIT	(281) KSFINKYPVVSIEDPFDQDDWATWTSFLSGVDIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
ENOB_SHEEP	(281) KSFINKYPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	
Consensus	(281) KSFINKYPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSV	

Figure 13 contd – homology of Human Beta Enolase with other species

		351		420
ENOB_HUMAN	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_MOUSE	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_RAT	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_BOVINE	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_PIG	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_HORSE	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_CHICKEN	(351)	TESIQACKLAQSHGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_FELIS	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGNK		
ENOB_CANINE	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_RABBIT	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
ENOB_SHEEP	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
Consensus	(351)	TESIQACKLAQSNWGVMSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDK		
		421	434	
ENOB_HUMAN	(421)	AIFAGRKFERNPKAK		
ENOB_MOUSE	(421)	AVFAGRKFERNPKAK		
ENOB_RAT	(421)	AVFAGRKFERNPKAK		
ENOB_BOVINE	(421)	AVFAGRKFERNPKAK		
ENOB_PIG	(421)	AVFAGRKFERNPKAK		
ENOB_HORSE	(421)	AVFAGRKFERNPKAK		
ENOB_CHICKEN	(421)	AKFAGRKFERNPKAK		
ENOB_FELIS	(421)	AVFAGRKFERNPKAK		
ENOB_CANINE	(421)	AVFAGRKFERNPKAK		
ENOB_RABBIT	(421)	AVFAGRKFERNPKAK		
ENOB_SHEEP	(421)	AVFAGRKFERNPKAK		
Consensus	(421)	AVFAGRKFERNPKAK		

Figure 14 – homology of Human Gamma Enolase with other species

ENOG_HUMAN	(1)	MSIEKIWAREILDSRGNPTEVDLYTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_MOUSE	(1)	MSIEKIWAREILDSRGNPTEVDLYTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_RAT	(1)	MSIQKIWAREILDSRGNPTEVDLHTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_BOVINE	(1)	MSIEKIWAREILDSRGNPTEVDLHTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_PIG	(1)	MSIEKIWAREILDSRGNPTEVDLYTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_HORSE	(1)	MSIEKIWAREILDSRGNPTEVDLCTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_CHICKEN	(1)	MAVERIHAREILDSRGNPTEVDLYTHKGMFRAAVPSGASTGIYEALERDNDKSRFLGKGV LQAVDHIN	
ENOG_FELIS	(1)	MSIEKIWAREILDSRGNPTEVDLYTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_CANINE	(1)	MSIEKIWAREILDSRGNPTEVDLHTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
ENOG_RABBIT	(1)	MSIEKIWAREILDSRGNPTEVDLYTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVGHIN	
ENOG_SHEEP	(1)	MSIEKIWAREILDSRGNPTEVDLHTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	
Consensus	(1)	MSIEKIWAREILDSRGNPTEVDLYTAKGLFRAAVPSGASTGIYEALERDGDQRYLGKGV LKAVDHIN	140
ENOG_HUMAN	(71)	STIAPALISSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGN	
ENOG_MOUSE	(71)	SRIAPALISSGISVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERDLPLYRHIAQLAGN	
ENOG_RAT	(71)	STIAPALISSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAEKDLPLYRHIAQLAGN	
ENOG_BOVINE	(71)	TTIAPVLISSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGN	
ENOG_PIG	(71)	TTIAPALVSSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERDLPLYRHIAQLAGN	
ENOG_HORSE	(71)	TTIAPALISSGFSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGN	
ENOG_CHICKEN	(71)	STVAPAIVGSGLSVVDQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAEKDVPLYRHIAQLAGN	
ENOG_FELIS	(71)	TTIAPALISSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGN	
ENOG_CANINE	(71)	TTIAPALISSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERDLPLYRHIAQLAGN	
ENOG_RABBIT	(71)	NTIAPALVSSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERDLPLYRHIAQLAGN	
ENOG_SHEEP	(71)	TTIAPVLISSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGN	
Consensus	(71)	TTIAPALISSGLSVVEQEKLNLMLDLDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGN	210
ENOG_HUMAN	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_MOUSE	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_RAT	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_BOVINE	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_PIG	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_HORSE	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_CHICKEN	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRI GAEVYHNLKSVIKKEYKGDATNVGDE	
ENOG_FELIS	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_CANINE	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_RABBIT	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
ENOG_SHEEP	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	
Consensus	(141)	SDLILPVPFNFVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYKGDATNVGDE	280
ENOG_HUMAN	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPDPSRYITGDQLGALY	
ENOG_MOUSE	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIMVIGMDVAASEFYRDGKYDLDFKSPADPSRYITGDQLGALY	
ENOG_RAT	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIMVIGMDVAASEFYRDGKYDLDFKSPADPSRCITGDQLGALY	
ENOG_BOVINE	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPADPSRYITGDQLGALY	
ENOG_PIG	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPADPSRYITGDQLGALY	
ENOG_HORSE	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPADPSRYITGDQLGALY	
ENOG_CHICKEN	(211)	GGFAPNILENSEALELLKEAIDKAGYTDKIVIGMDVAASEFYRDGKYDLDFKSPDDPSRYISADELGDLY	
ENOG_FELIS	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFHRDGKYDLDFKSPADPSRYITGDQLGALY	
ENOG_CANINE	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFHRDGKYDLDFKSPADPSRYITGDQLGALY	
ENOG_RABBIT	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPADPSRYITGDQLGTY	
ENOG_SHEEP	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPADPSRYITGDQLGALY	
Consensus	(211)	GGFAPNILENSEALELVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPADPSRYITGDQLGALY	350
ENOG_HUMAN	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_MOUSE	(281)	QDFVRNYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_RAT	(281)	QDFVRNYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_BOVINE	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_PIG	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_HORSE	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_CHICKEN	(281)	QSFVRAYPVLISIEDPFDQDDWEAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_FELIS	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_CANINE	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_RABBIT	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
ENOG_SHEEP	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	
Consensus	(281)	QDFVRDYPVVSIEDPFDQDDWAAWSKFTANVGIIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSV	

Figure 14 contd – homology of Human Gamma Enolase with otherspecies

		351		420
ENOG_HUMAN	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_MOUSE	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_RAT	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGEE		
ENOG_BOVINE	(351)	TEAIQACRLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_PIG	(351)	SEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_HORSE	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_CHICKEN	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVALCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_FELIS	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_CANINE	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_RABBIT	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
ENOG_SHEEP	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
Consensus	(351)	TEAIQACKLAQENGWGMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDE		
		421	434	
ENOG_HUMAN	(421)	ARFAGHNFRNPSVL		
ENOG_MOUSE	(421)	ARFAGHNFRNPSVL		
ENOG_RAT	(421)	ARFAGHNFRNPSVL		
ENOG_BOVINE	(421)	ARFAGHNFRNPSVL		
ENOG_PIG	(421)	ARFAGHNFRNPSVL		
ENOG_HORSE	(421)	ARFAGHNFRNPSVL		
ENOG_CHICKEN	(421)	ARFAGHNFRNPSVL		
ENOG_FELIS	(421)	ARFAGHNFRNPSVL		
ENOG_CANINE	(421)	ARFAGHNFRNPSVL		
ENOG_RABBIT	(421)	ARFAGHNFRNPSVL		
ENOG_SHEEP	(421)	ARFAGHNFRNPSVL		
Consensus	(421)	ARFAGHNFRNPSVL		

Figure 15

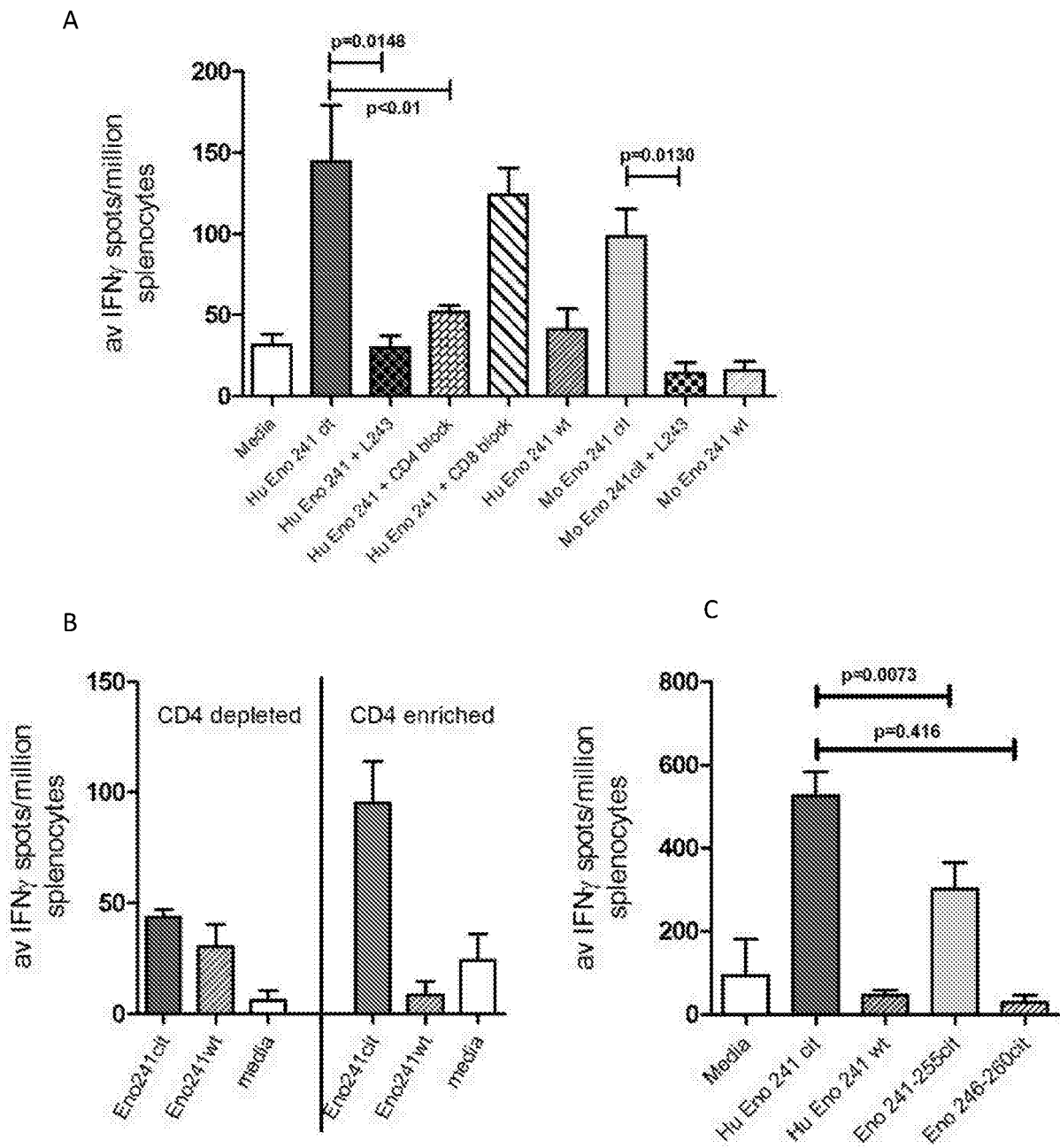


Figure 16

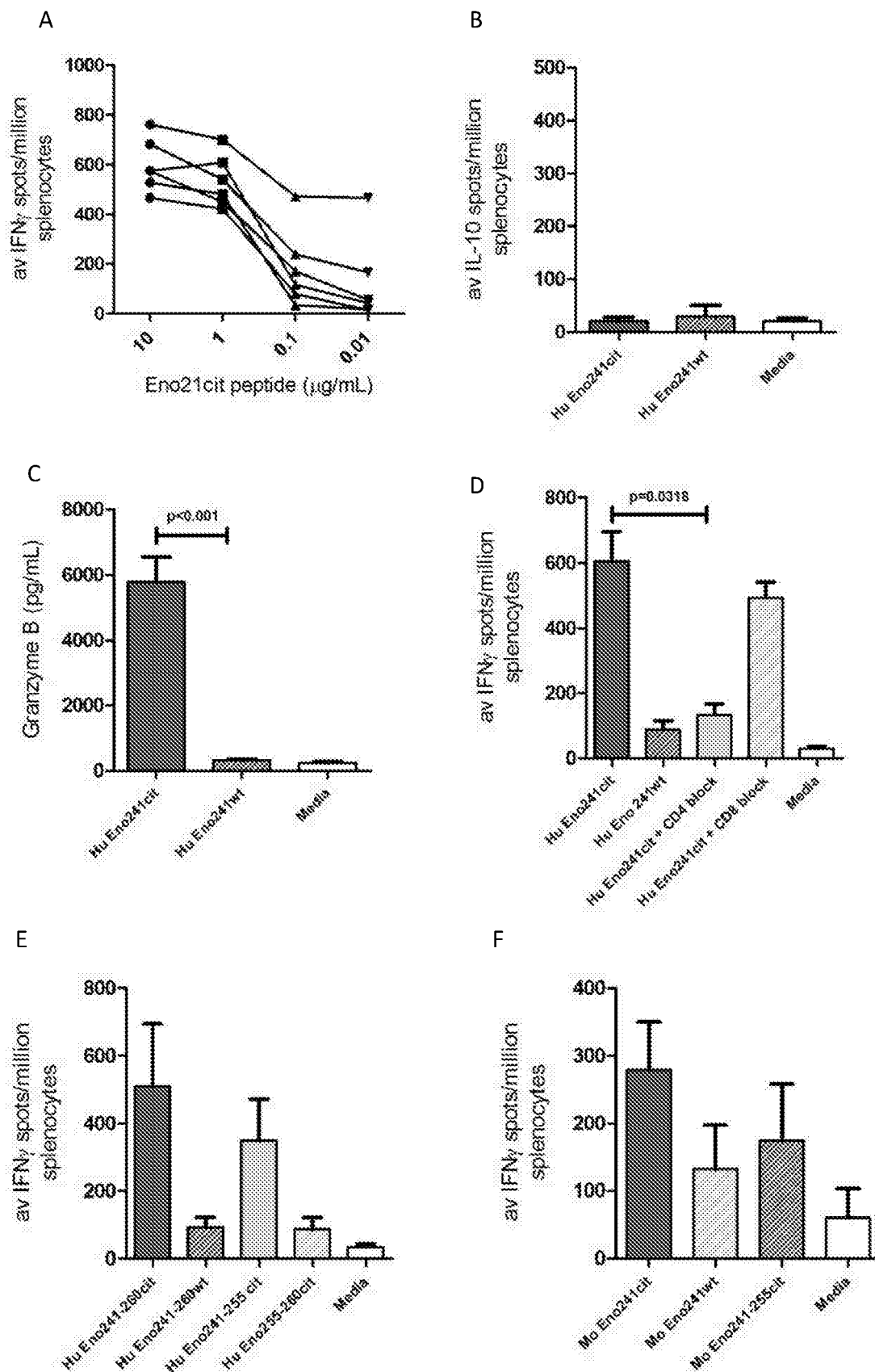


Figure 17

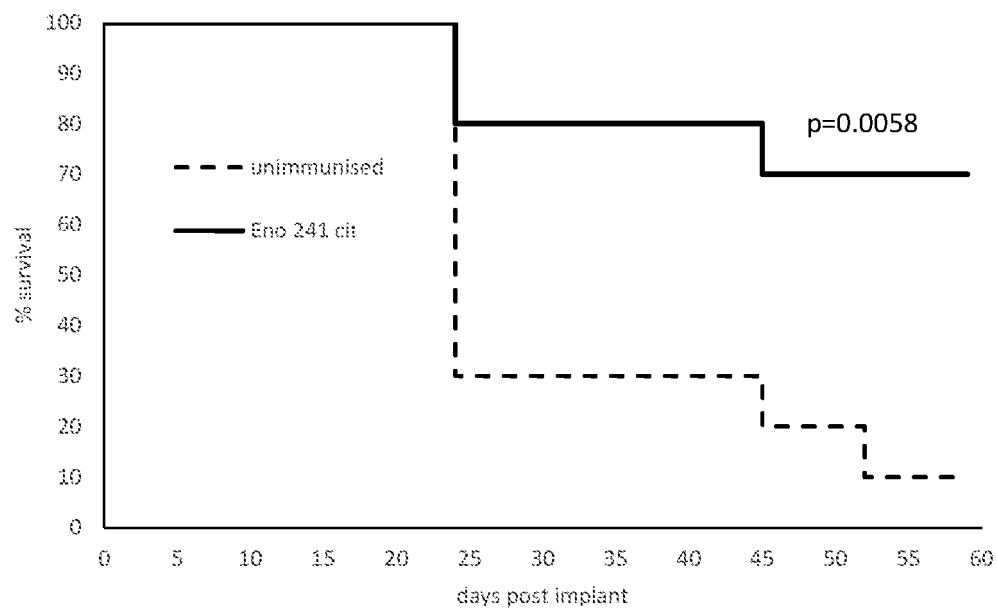


Figure 18

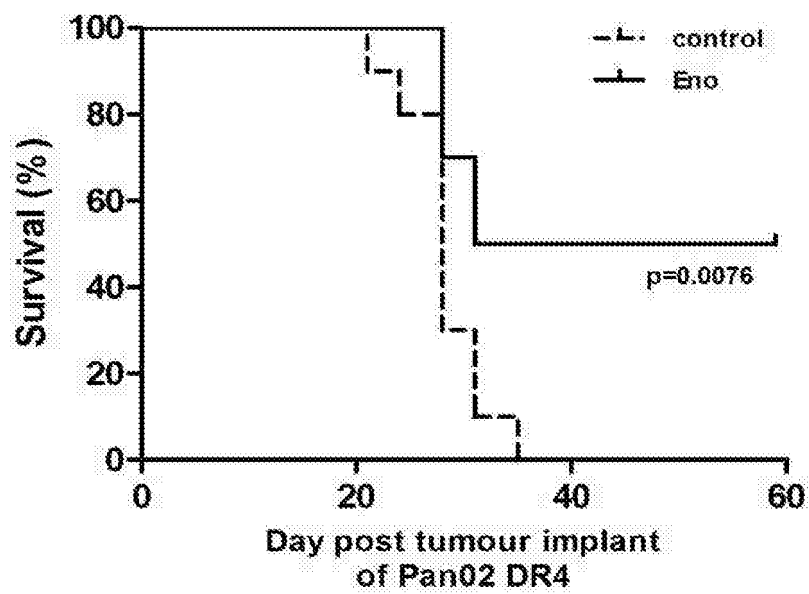


Figure 19

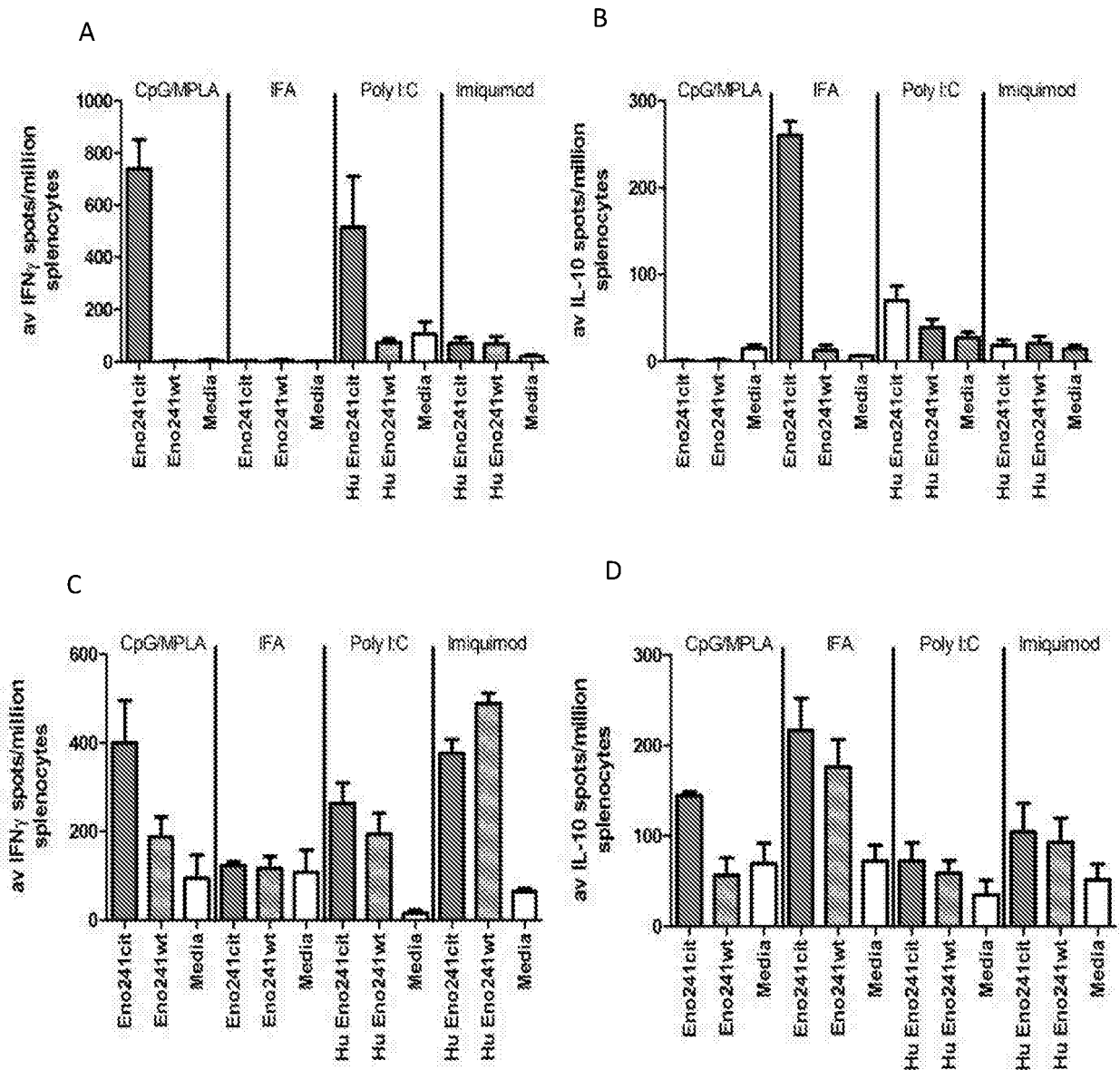
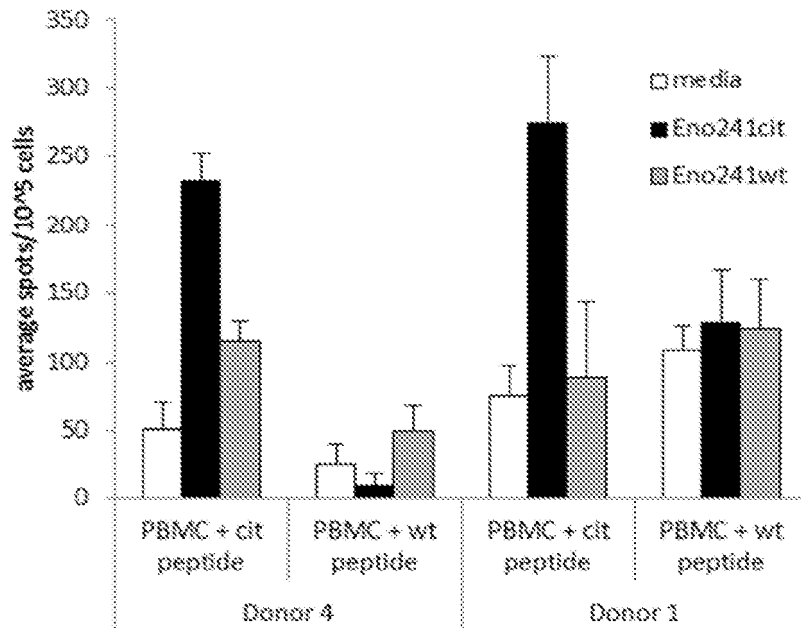


Figure 20

A



B

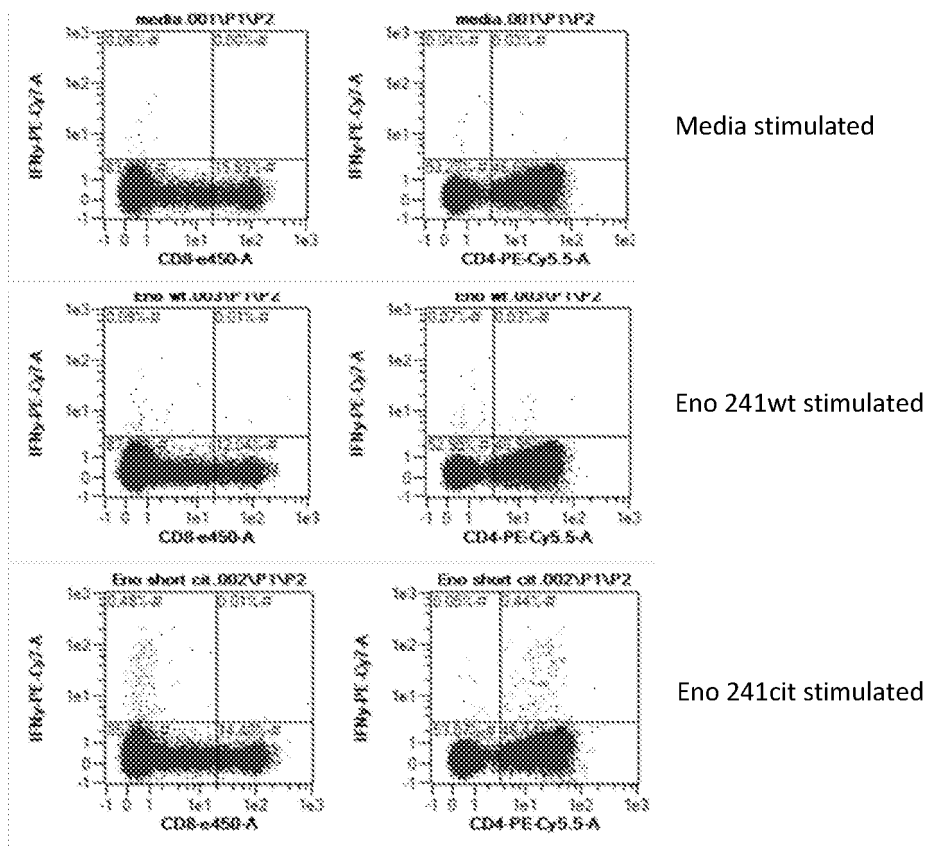


Figure 20 continued

C

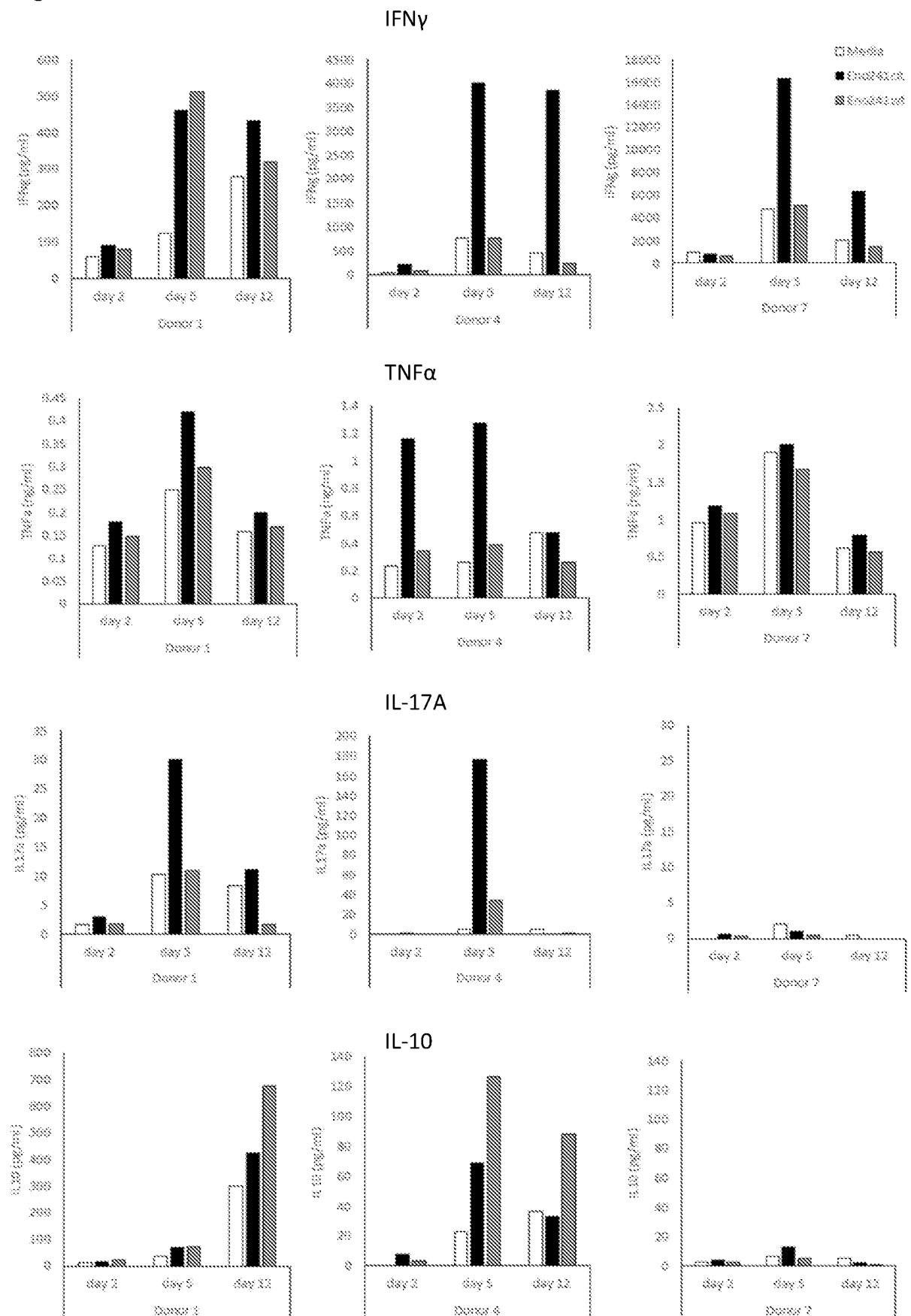


Figure 21

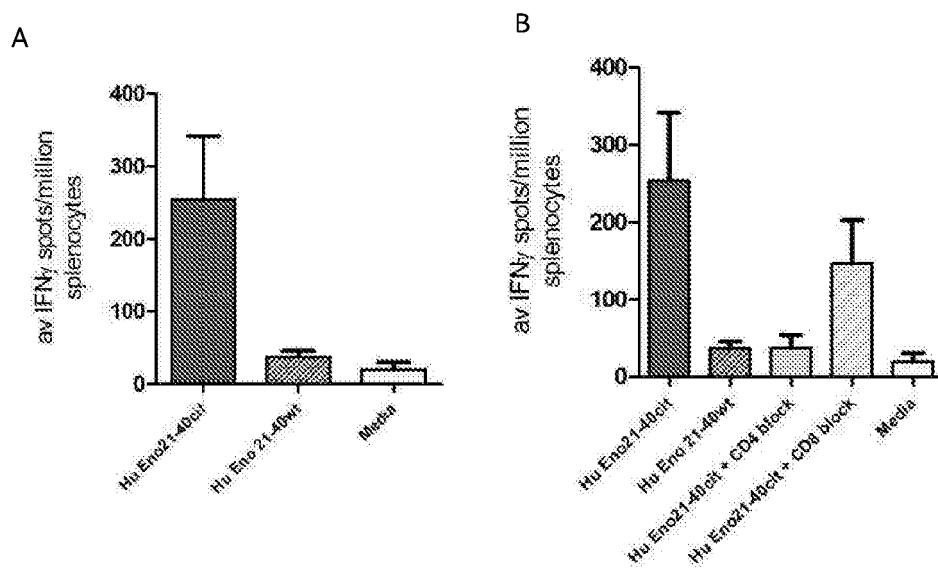


Figure 22

