

ChAd3	(1)	<u>MKRAKTSSESENPAVYDQMTSGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHLTPSPPLKAKKKNINISHE</u>
PanAd3	(1)	<u>MKRAKTSSELTENPAVYDQMTNGPFPSVPELTPPVNSPDGHOESPPGVLSIRHSEPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPPLKAKKKNINISHO</u>
ChAd17	(1)	<u>MKRAKTSSESENPAVYDQMTSGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHLTPSPPLKAKKKNINISHE</u>
ChAd19	(1)	<u>MKRAKTSKXSENPAVYDQMTNGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPPLKAKKKNINISHE</u>
ChAd24	(1)	<u>MKRAKTSSESENPAVYDQMTNGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPSPPLKAKKKNINISHE</u>
ChAd155	(1)	<u>MKRAKTSSESENPAVYDQMTSGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPSPPLKAKKKNINISHE</u>
ChAd11	(1)	<u>MKRAKTSSESENPAVYDQMTNGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPSPPLKAKKKNINISHE</u>
ChAd20	(1)	<u>MKRAKTSSESENPAVYDQMTSGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPSPPLKAKKKNINISHE</u>
ChAd31	(1)	<u>MKRAKTSSESENPAVYDQMTSGPFPSVPELTPPVNSPDGHOESPPGVLSINAFPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPSPPLKAKKKNINISHE</u>
PanAd1	(1)	<u>MKRAKTSSELTENPAVYDQMTNGPFPSVPELTPPVNSPDGHOESPPGVLSIRHSEPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPSPPLKAKKKNINISHO</u>
PanAd2	(1)	<u>MKRAKTSSELTENPAVYDQMTNGPFPSVPELTPPVNSPDGHOESPPGVLSIRHSEPELVTSHGMLAKMGSELSDPDAGNTISOHMLTPSPPLKAKKKNINISHO</u>
ChAd3	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
PanAd3	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
ChAd17	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
ChAd19	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
ChAd24	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
ChAd155	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
ChAd11	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
ChAd20	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
ChAd31	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
PanAd1	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>
PanAd2	(101)	<u>TSSPLTWSTSCALIMAAAPPAVAGTSLIMVOSAPPIVODAKIDIAIKGPELVSEGKIPLOTOSAPLTAADSSHTIVSATPIUNVSGSICLDQVDFWYCH</u>

FIG. 1A

ChAd3	(201)	DGAI8PRGCEPHWISB;HIAVYVTCN;DNDNATGQRAFGAAYFISG;DQRAFGMR;DANCOLLHVA;YFDDONNIS;RI;GOGPIVYN;DANEN;
PanAd3	(200)	DGAI8PRGCEPHWISB;HIAVYVTCN;DNDNATGQRAFGAAYFISG;DQRAFGMR;DANCOLLHVA;YFDDONNIS;RI;GOGPIVYN;DANEN;
ChAd17	(201)	DGAI8PRGCEPHWISB;HIAVYVTCN;DNDNATGQRAFGAAYFISG;DQRAFGMR;DANCOLLHVA;YFDDONNIS;RI;GOGPIVYN;DANEN;
ChAd19	(201)	DGAI8PRGCEPHWISB;HIAVYVTCN;DNDNATGQRAFGAAYFISG;DQRAFGMR;DANCOLLHVA;YFDDONNIS;RI;GOGPIVYN;DANEN;
ChAd24	(201)	DGAI8PRGCEPHWISB;HIAVYVTCN;DNDNATGQRAFGAAYFISG;DQRAFGMR;DANCOLLHVA;YFDDONNIS;RI;GOGPIVYN;DANEN;
ChAd155	(201)	NGKIGM;RPR;EHWIS;NALAWWIC;D;TING;FALOR;SGAN;WISG;D;RABGGM;R;DAN;COLLHVA;YFDDONNIS;RI;GOGPIVYN;SPANEN;
ChAd11	(201)	NGKIGM;RPR;EHWIS;NALAWWIC;D;TING;FALOR;SGAN;WISG;D;RABGGM;R;DAN;COLLHVA;YFDDONNIS;RI;GOGPIVYN;SPANEN;
ChAd20	(201)	NGKIGM;RPR;EHWIS;NALAWWIC;D;TING;FALOR;SGAN;WISG;D;RABGGM;R;DAN;COLLHVA;YFDDONNIS;RI;GOGPIVYN;SPANEN;
ChAd31	(201)	NGKIGM;RPR;EHWIS;NALAWWIC;D;TING;FALOR;SGAN;WISG;D;RABGGM;R;DAN;COLLHVA;YFDDONNIS;RI;GOGPIVYN;SPANEN;
PanAd_1	(200)	NGKIPAN;DCEP;EHWIT;NALAWWIC;D;TING;FALOR;SGAN;WISG;D;RABGGM;R;DAN;COLLHVA;YFDDONNIS;RI;GOGPIVYN;SPANEN;
PanAd2	(200)	NGKIPAN;DCEP;EHWIT;NALAWWIC;D;TING;FALOR;SGAN;WISG;D;RABGGM;R;DAN;COLLHVA;YFDDONNIS;RI;GOGPIVYN;SPANEN;
ChAd3	(301)	DAN;RGH;TIT;D;WIKK;D;T-----KUS;S;CH;D;D;IN;Q;W;H;K;IG;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
PanAd3	(300)	DAN;RGH;TIT;D;WIKK;D;T-----KUS;S;CH;D;D;IN;Q;W;H;K;IG;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
ChAd17	(301)	DAN;RGH;TIT;D;WIKK;D;T-----KUS;S;CH;D;D;IN;Q;W;H;K;IG;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
ChAd19	(301)	DAN;RGH;TIT;D;WIKK;D;T-----KUS;S;CH;D;D;IN;Q;W;H;K;IG;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
ChAd24	(301)	DAN;RGH;TIT;D;WIKK;D;T-----KUS;S;CH;D;D;IN;Q;W;H;K;IG;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
ChAd155	(301)	DAN;RGH;M;H;S;N;IKK;E;W;IKTAKG;D;D;ATAIN;A;GDG;D;E;S;G;S;D;N;P;I;K;L;G;I;G;I;D;D;S;S;P;A;T;A;K;G;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
ChAd11	(301)	DAN;RGH;M;H;S;N;IKK;E;W;IKTAKG;D;D;ATAIN;A;GDG;D;E;S;G;S;D;N;P;I;K;L;G;I;G;I;D;D;S;S;P;A;T;A;K;G;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
ChAd20	(301)	DAN;RGH;M;H;S;N;IKK;E;W;IKTAKG;D;D;ATAIN;A;GDG;D;E;S;G;S;D;N;P;I;K;L;G;I;G;I;D;D;S;S;P;A;T;A;K;G;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
ChAd31	(301)	DAN;RGH;M;H;S;N;IKK;E;W;IKTAKG;D;D;ATAIN;A;GDG;D;E;S;G;S;D;N;P;I;K;L;G;I;G;I;D;D;S;S;P;A;T;A;K;G;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
PanAd1	(300)	DAN;RGH;M;H;S;N;IKK;E;W;IKTAKG;D;D;ATAIN;A;GDG;D;E;S;G;S;D;N;P;I;K;L;G;I;G;I;D;D;S;S;P;A;T;A;K;G;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;
PanAd2	(300)	DAN;RGH;M;H;S;N;IKK;E;W;IKTAKG;D;D;ATAIN;A;GDG;D;E;S;G;S;D;N;P;I;K;L;G;I;G;I;D;D;S;S;P;A;T;A;K;G;T;S;F;I;N;T;G;A;L;U;Y;G;N;I;C;D;K;P;H;M;T;

FIG. 1B

ChAd3	(365)	TPDPSPICRTHSDXICQETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
PanAd3	(364)	TPDPSPICRTHADXCQETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd17	(365)	TPDPSPICRTHSDXICQETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd19	(365)	TPDPSPICRTHSDXICQETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd24	(365)	TPDPSPICRTHSDXICQETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd155	(401)	TPDPSPICRTHVSEKIDAKETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd11	(401)	TPDPSPICRTHVSEKIDAKETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd20	(401)	TPDPSPICRTHVSEKIDAKETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd31	(401)	TPDPSPICRTHVSEKIDAKETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
PanAd1	(400)	TPDPSPICRTHVSEKIDAKETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
PanAd2	(400)	TPDPSPICRTHVSEKIDAKETIVTKGSSQZASAPAVASNAFESPTGMAFVTHREPNAGVNNSSBKOAMERNGCANAPYNNAGFMPNIAA
ChAd3	(465)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
PanAd3	(464)	VPXKIOSQAMNVVSWLHGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
ChAd17	(465)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
ChAd19	(465)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
ChAd24	(465)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
ChAd155	(501)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
ChAd11	(501)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
ChAd20	(501)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
ChAd31	(501)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
PanAd1	(500)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ
PanAd2	(500)	VPXKIOSQAMNVVSOVWINGDKKPNITLITINGNEFSSTSOVGYSTSEHMAWESGQAETETAHNSTSESYTAQ

FIG. 1C

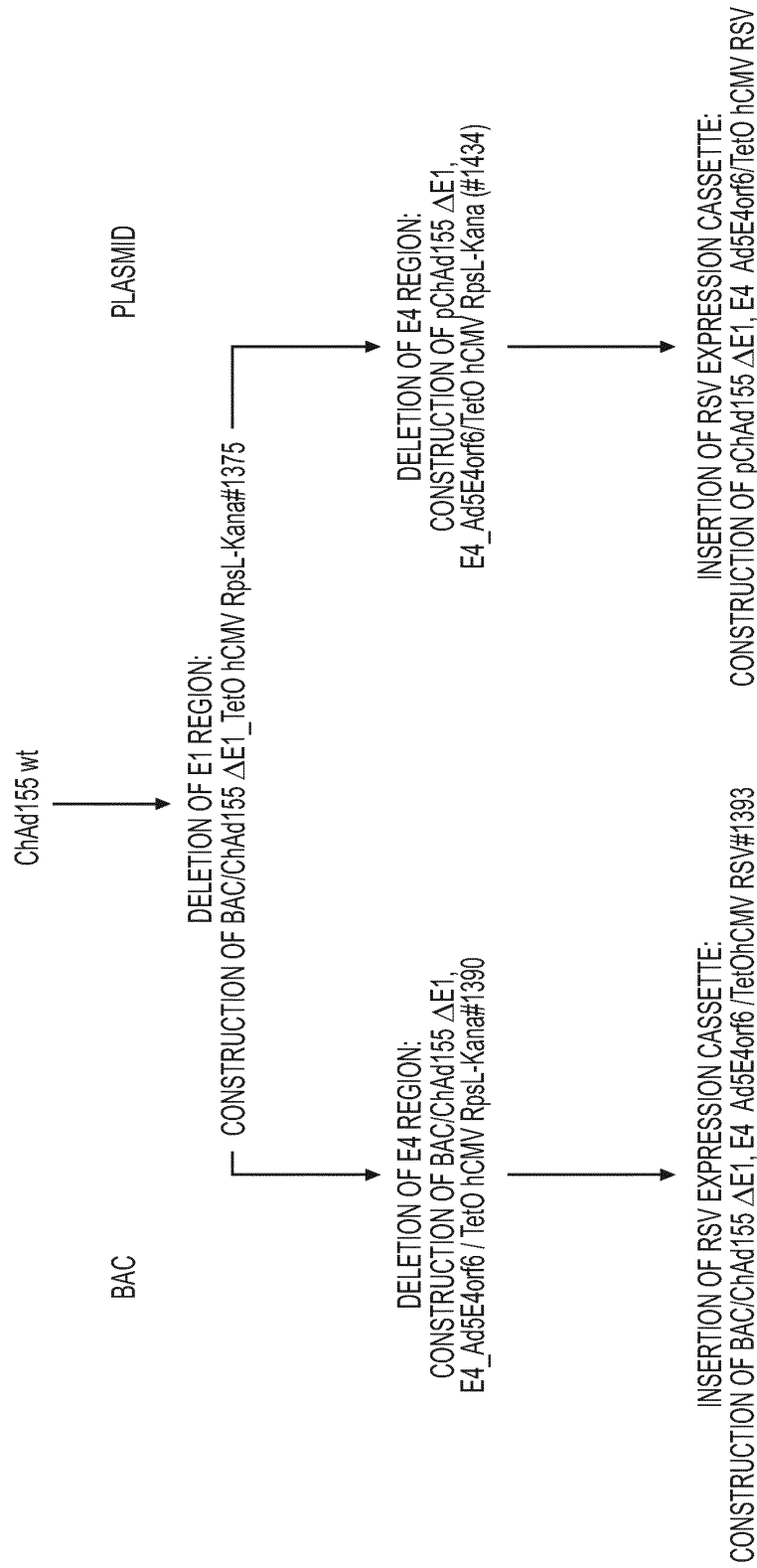


FIG. 2

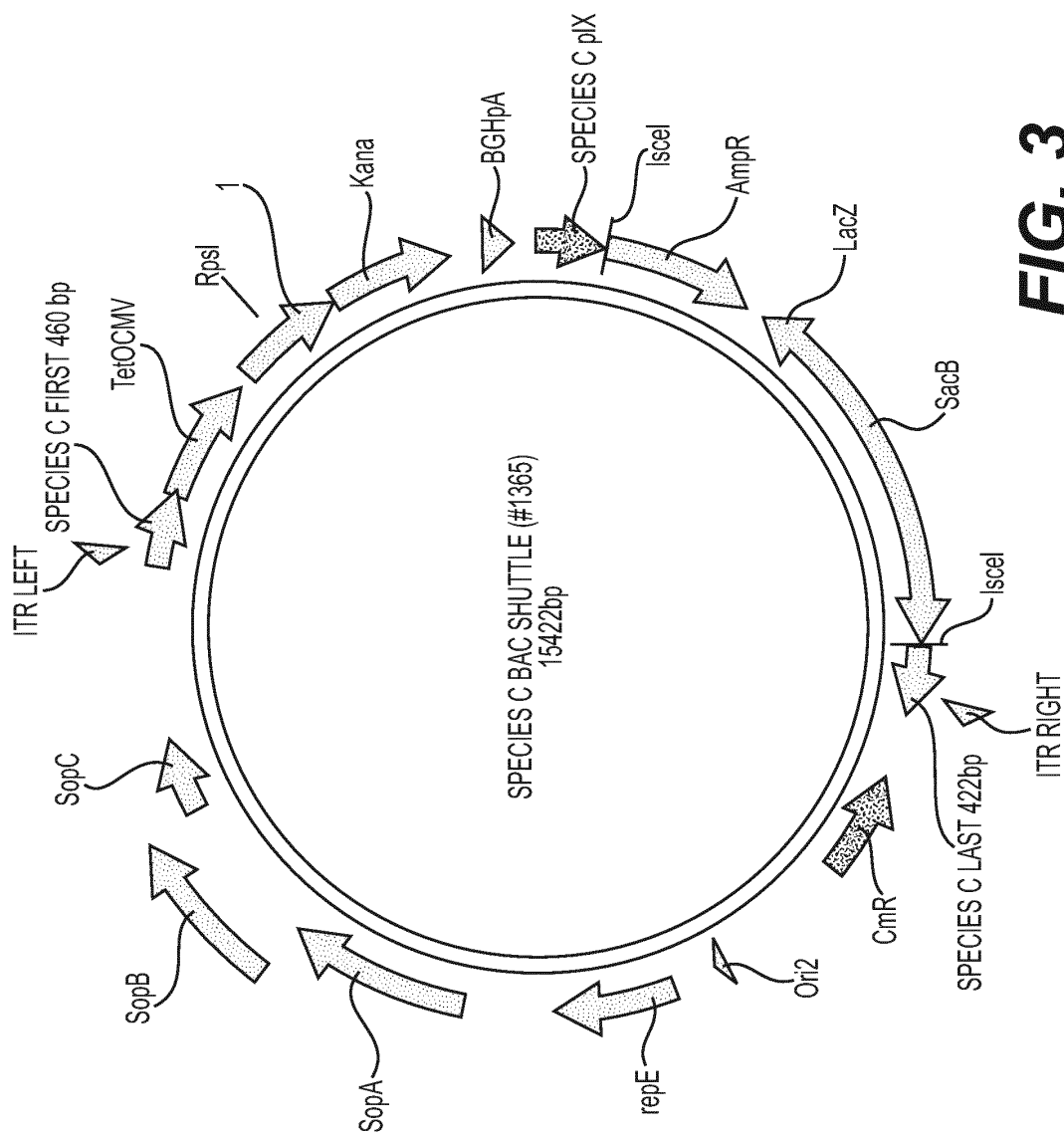


FIG. 3

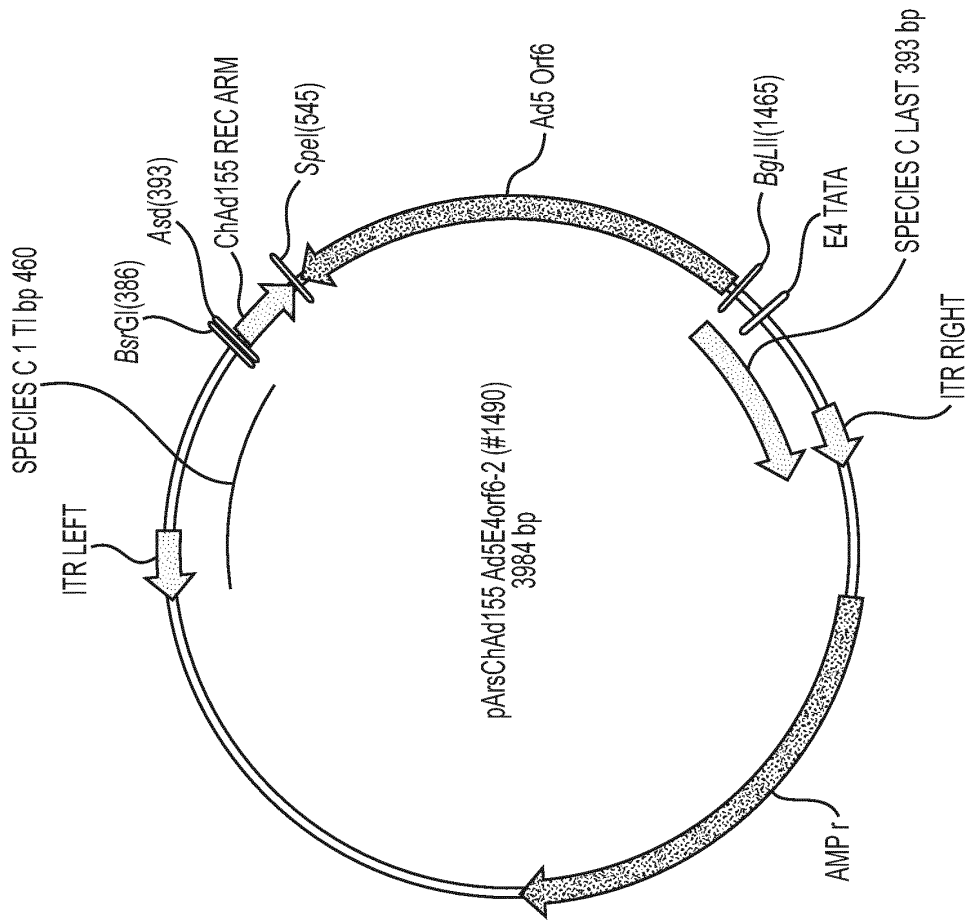


FIG. 4

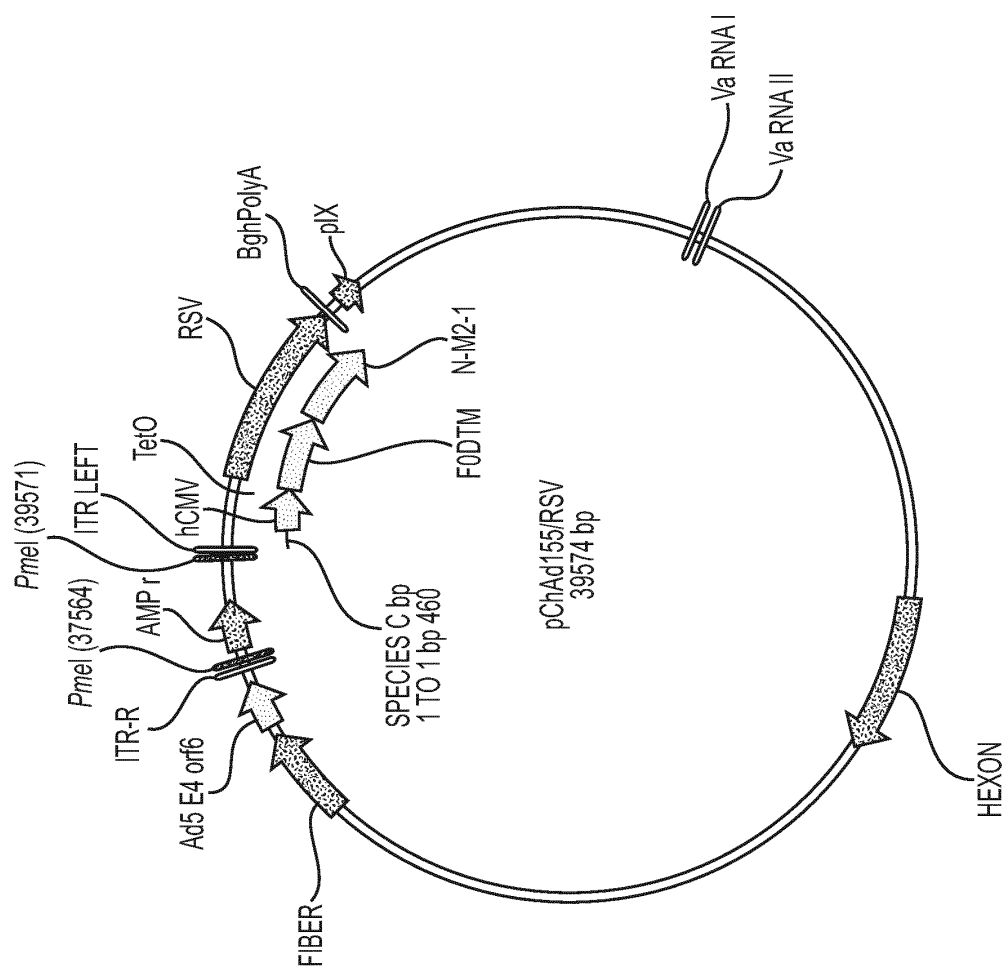


FIG. 5

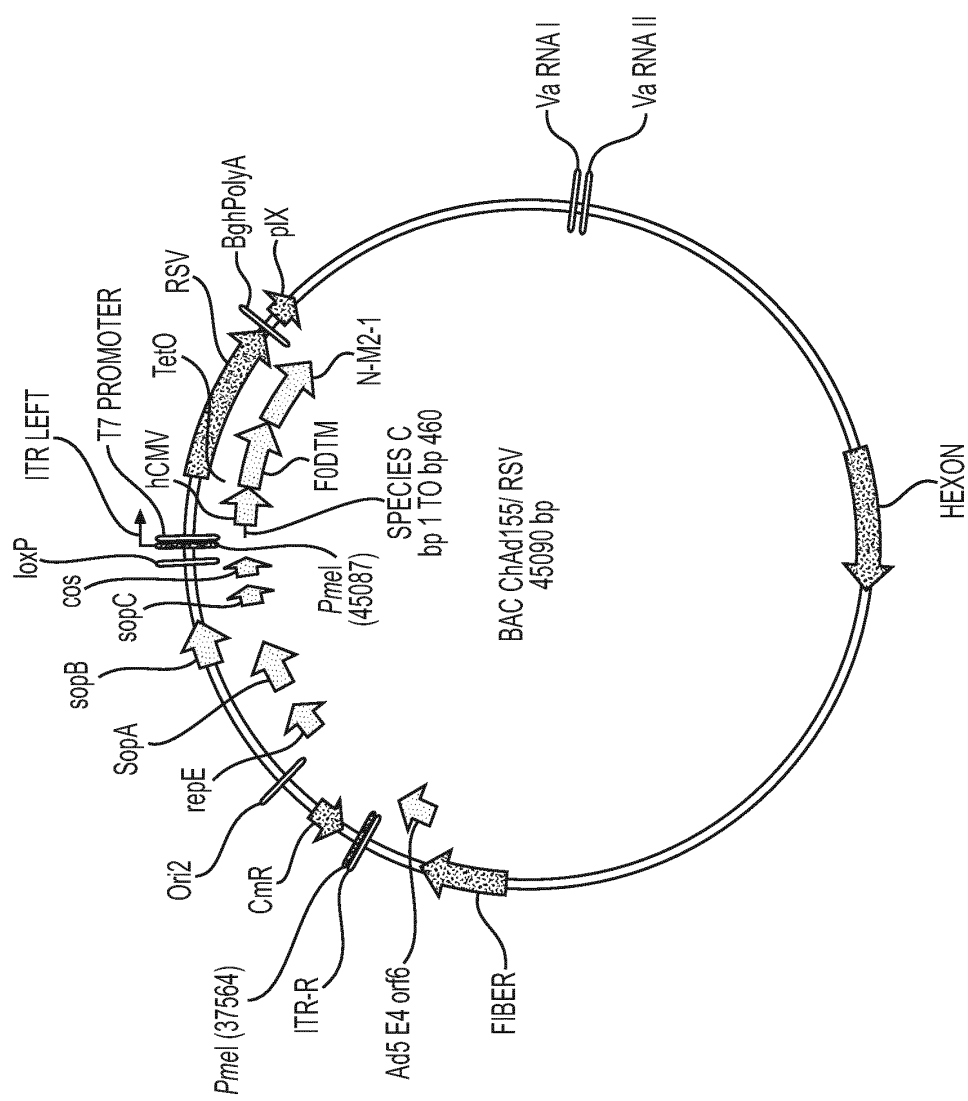


FIG. 6

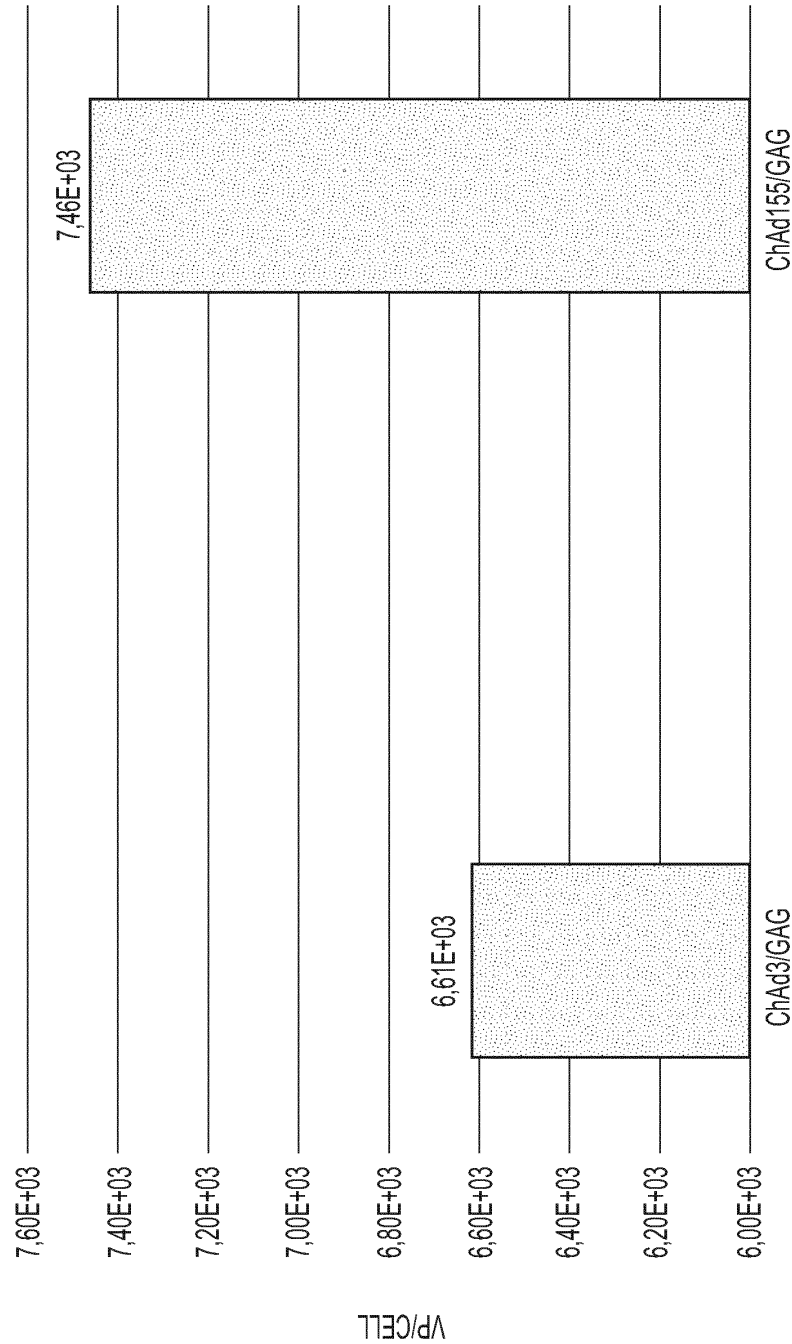


FIG. 7

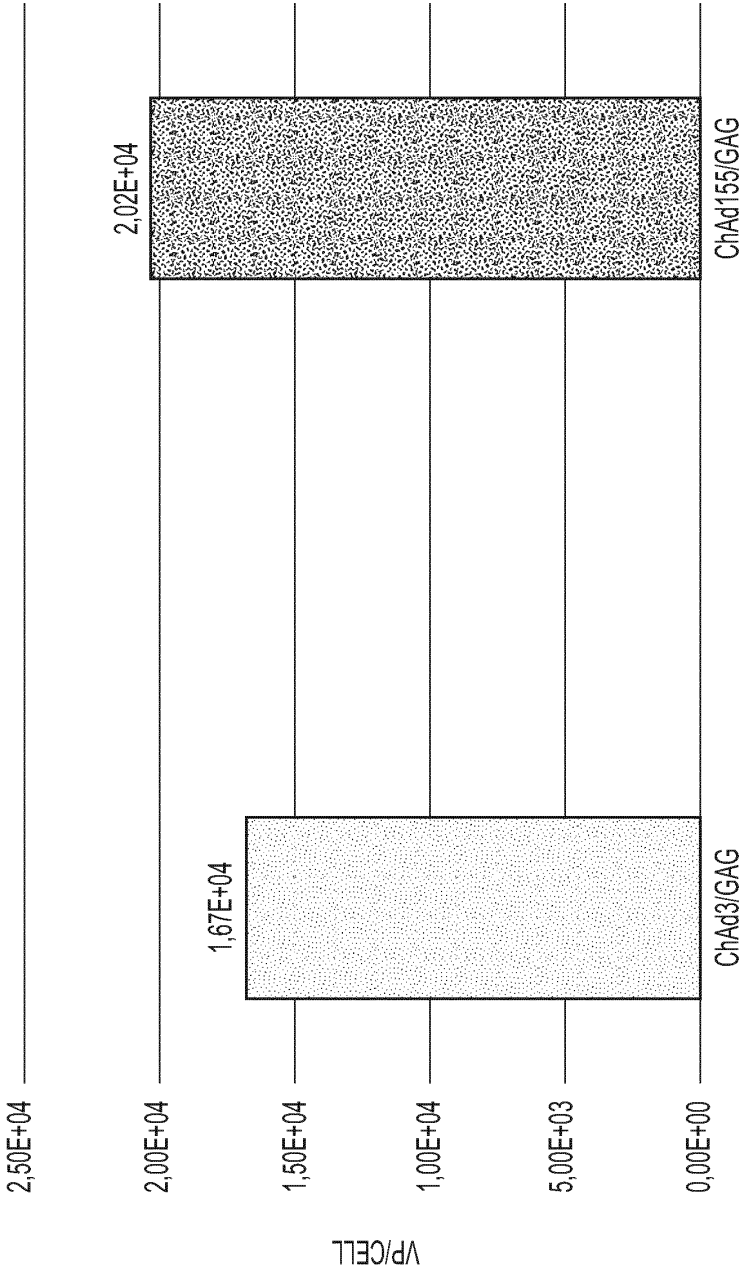


FIG. 8

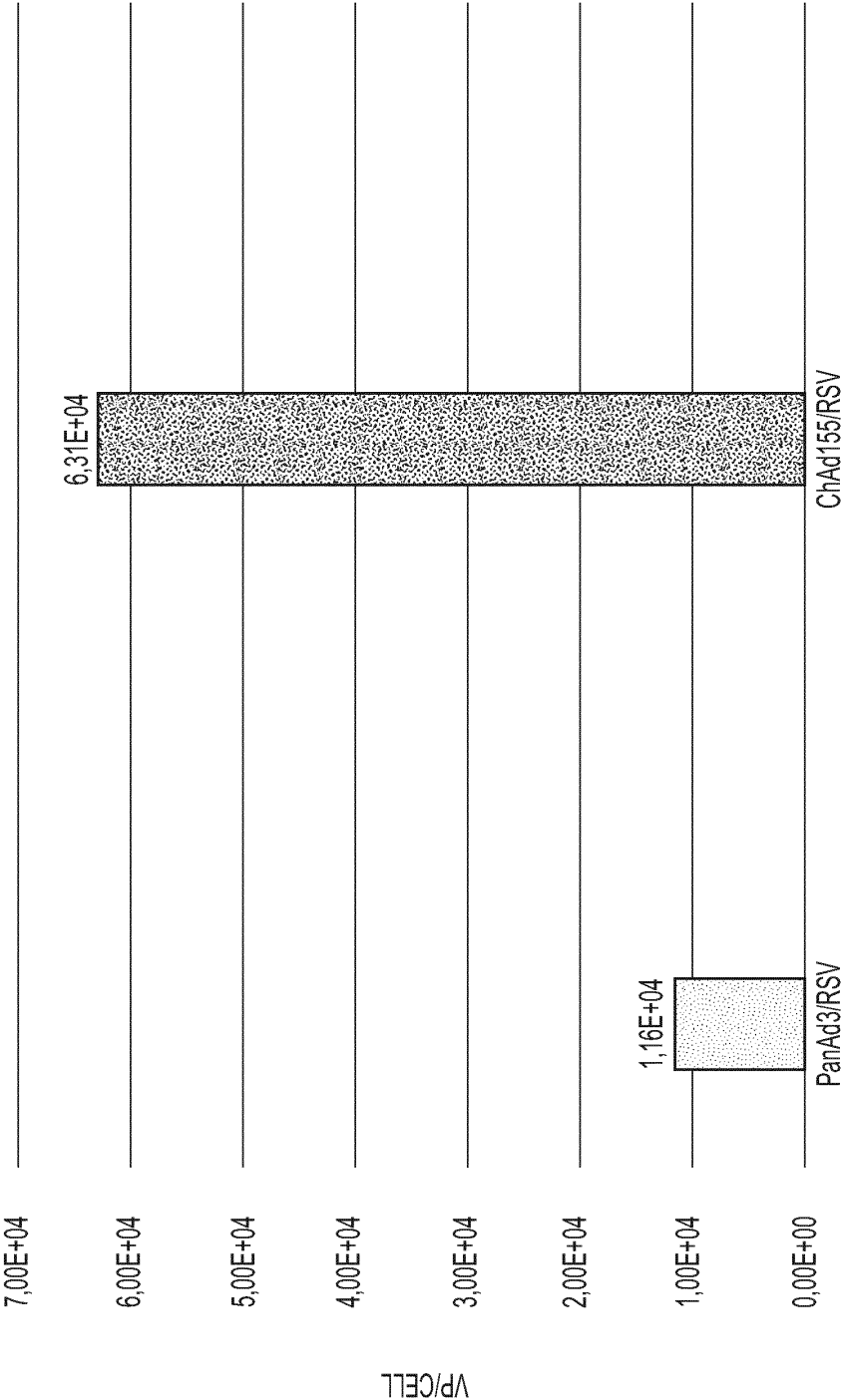


FIG. 9

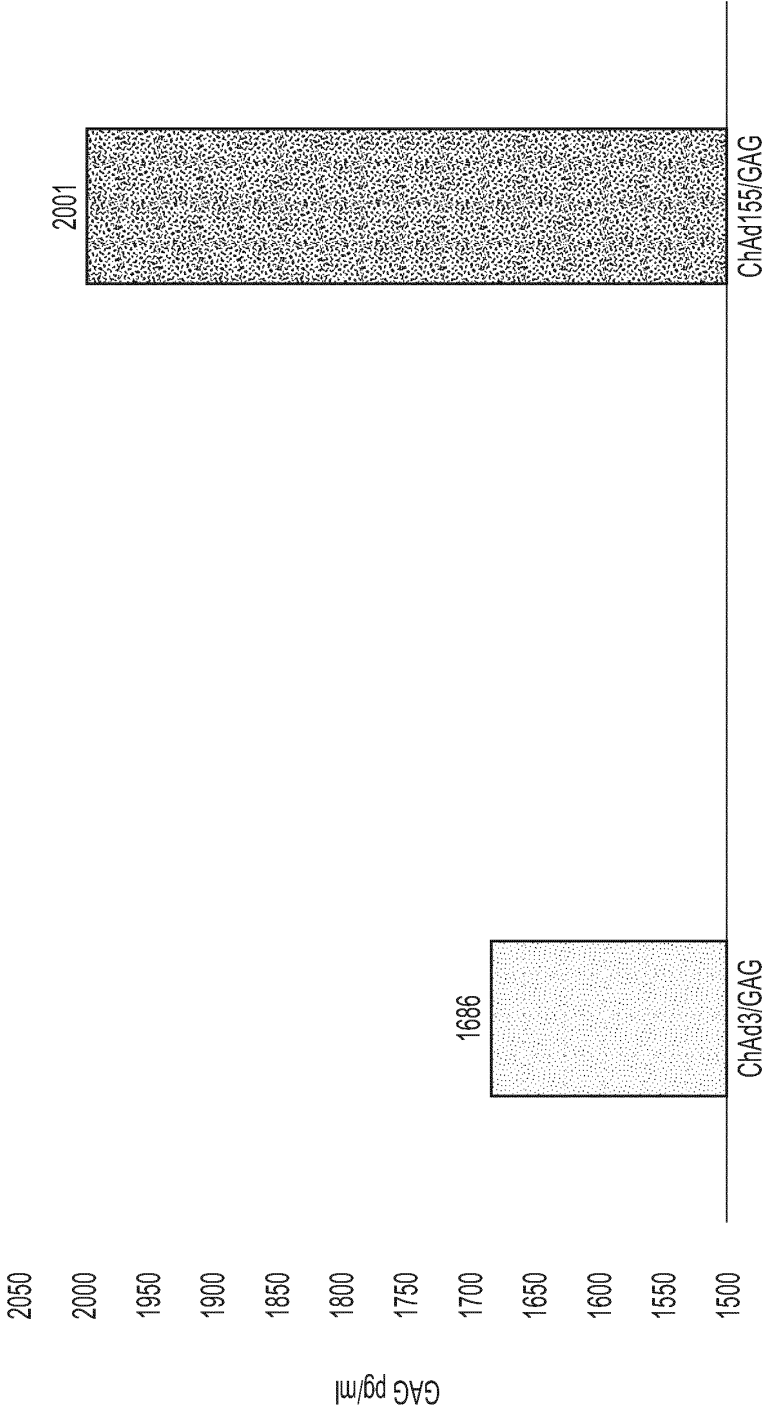


FIG. 10

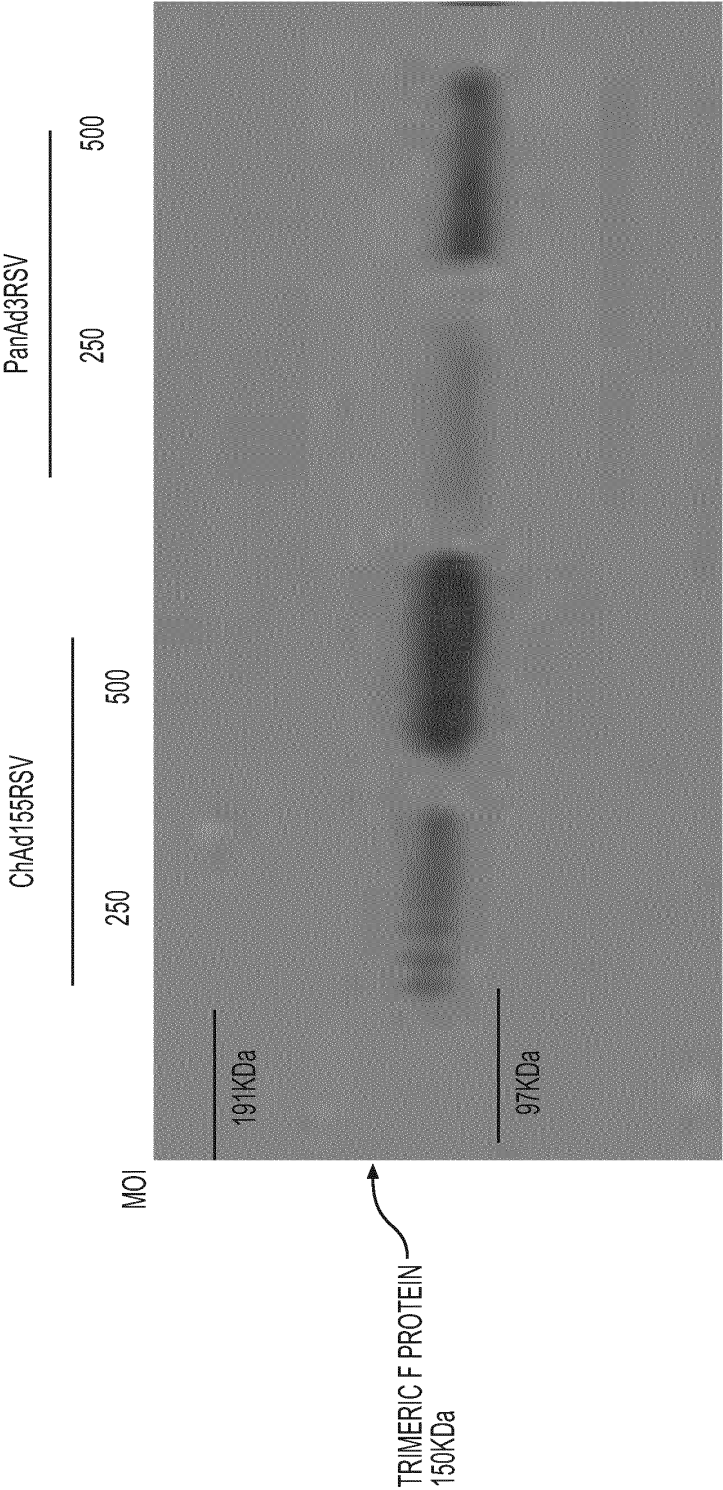
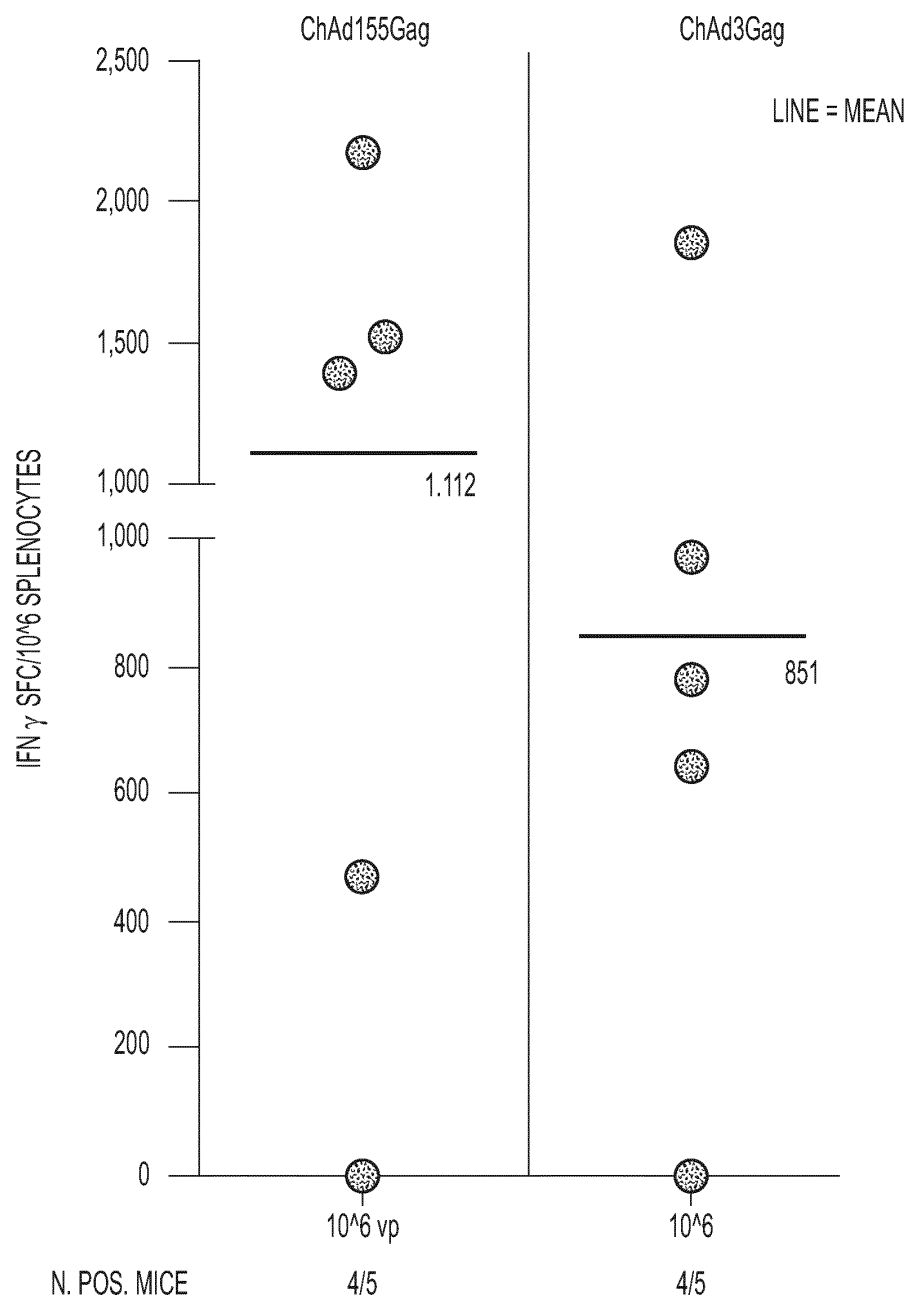


FIG. 11

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**FIG. 12**

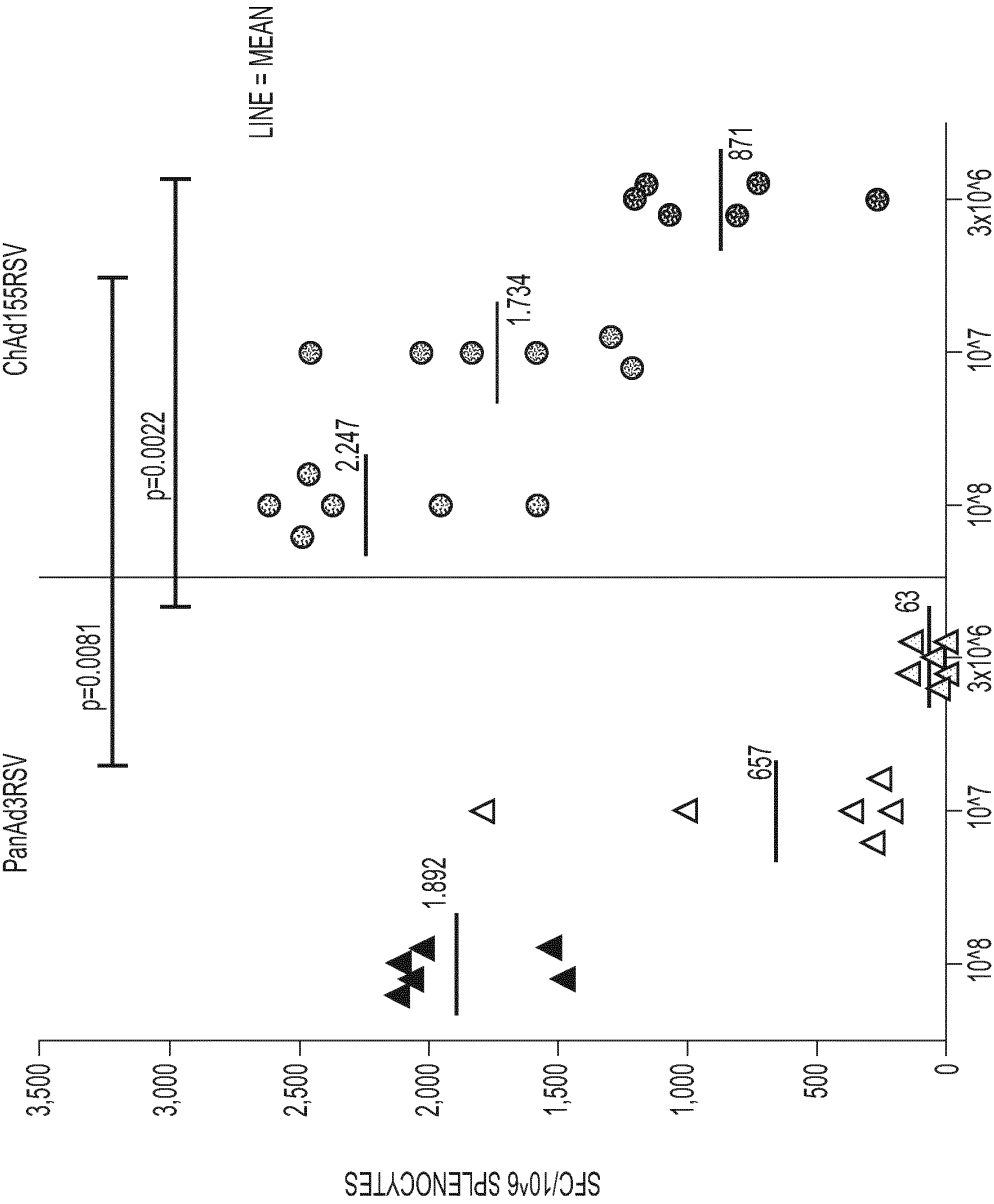


FIG. 13