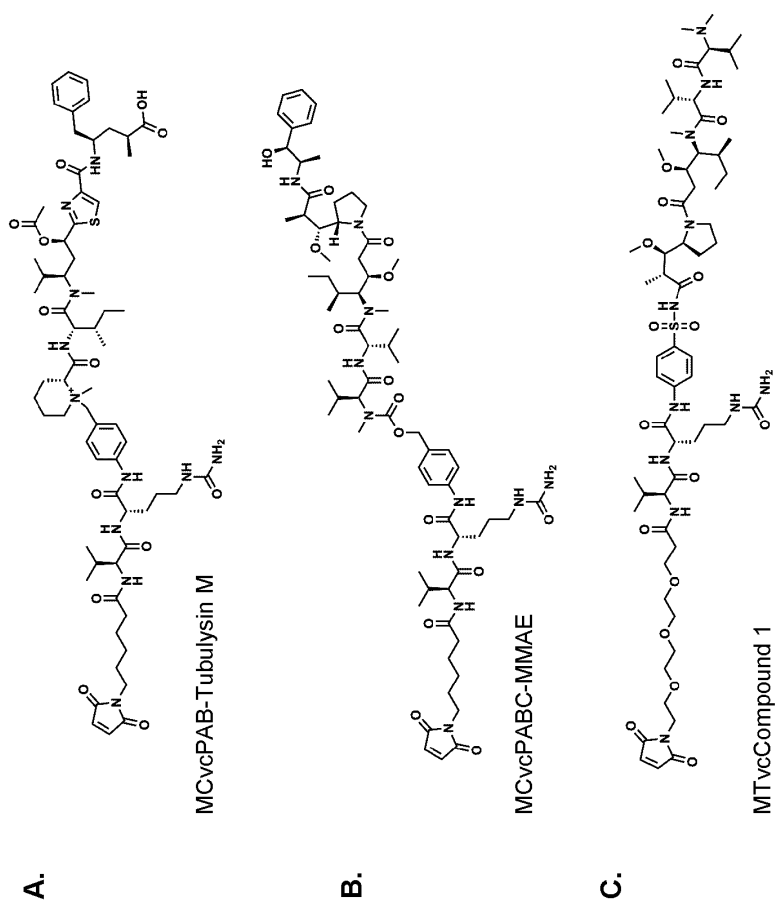


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**FIG. 1**

A.

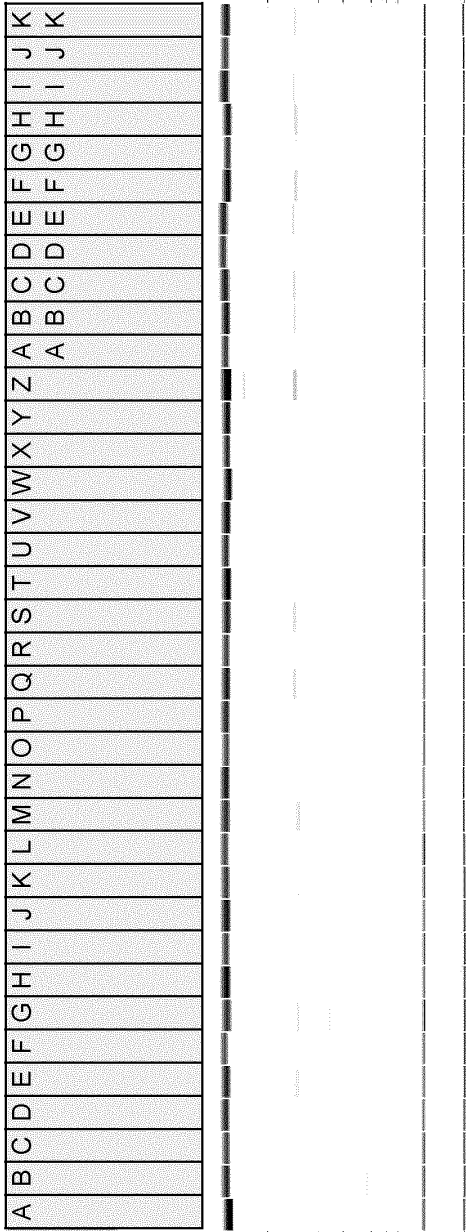


FIG. 2

**മ്**

|   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | I | J | K |
| A | B | C | D | E | F | G | H | I | J | K |

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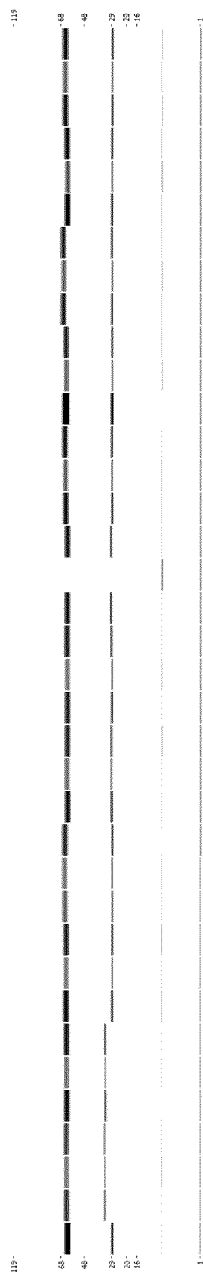


**FIG. 2 (con't...)**

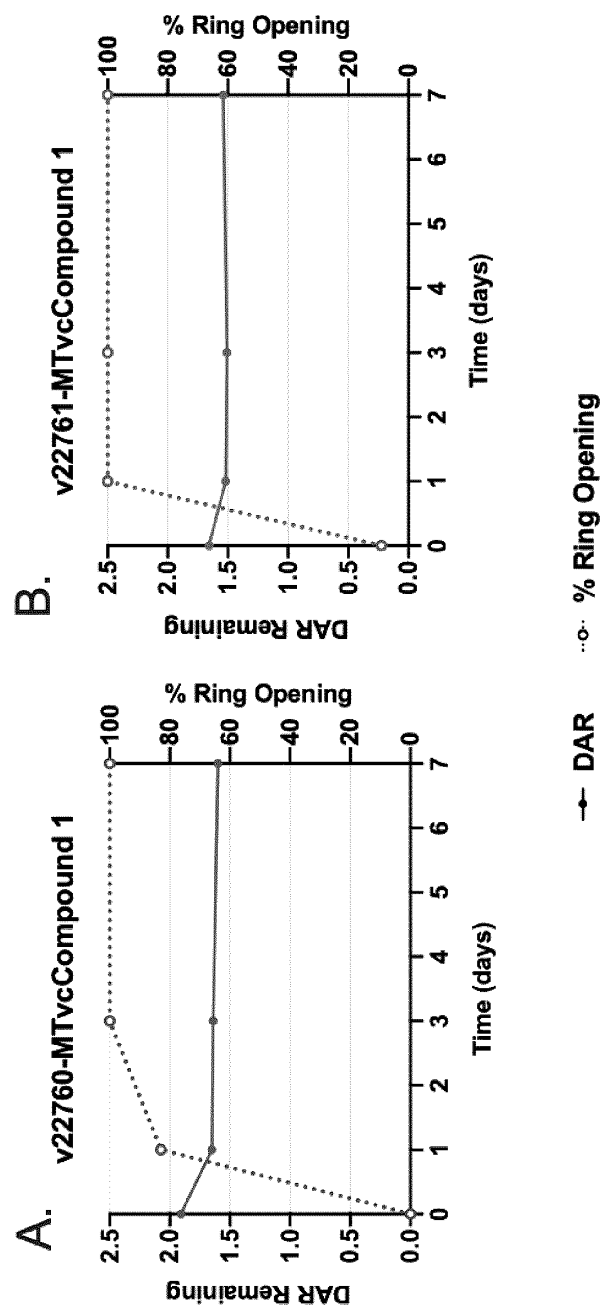


FIG. 3

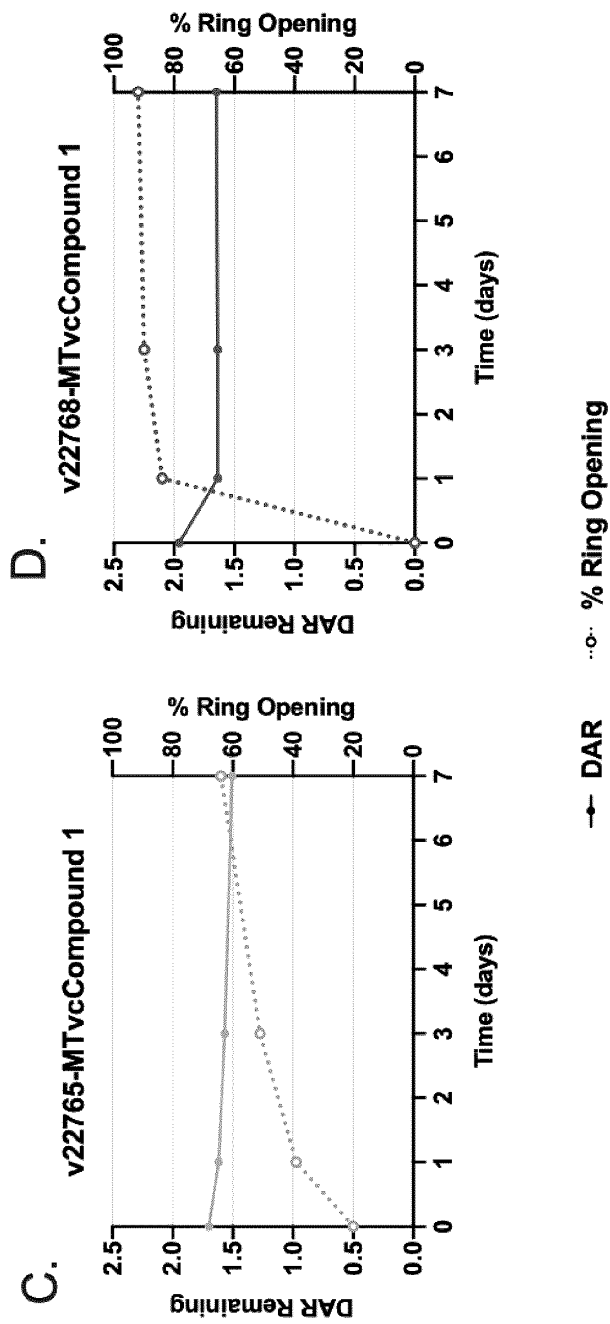


FIG. 3 (con't...)

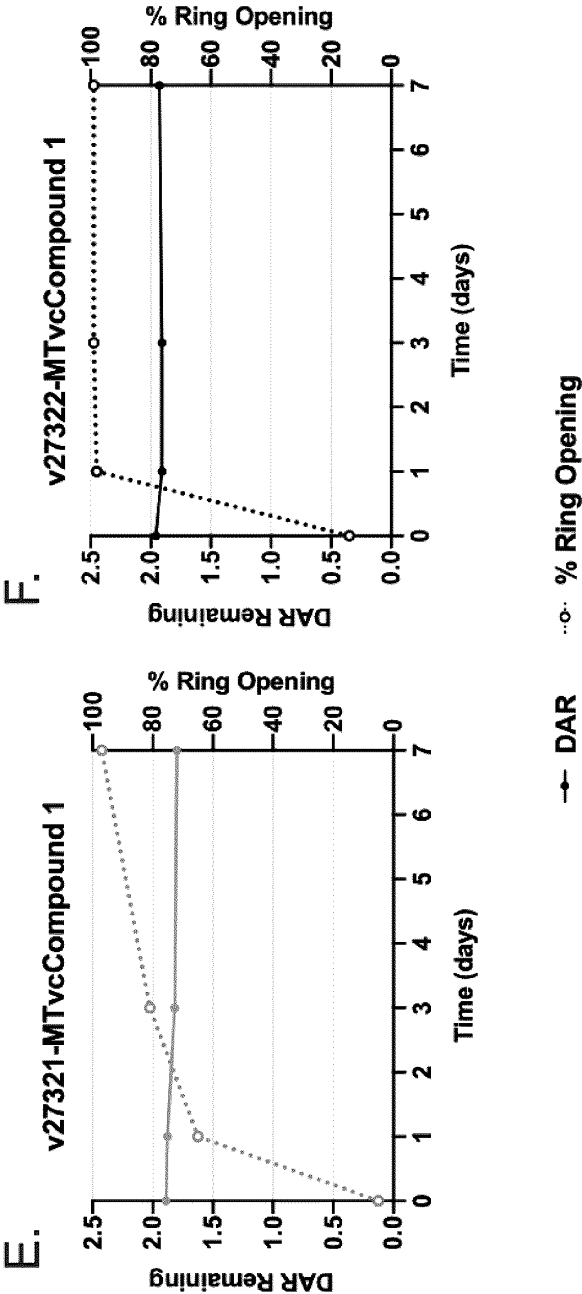


FIG. 3 (con't...)

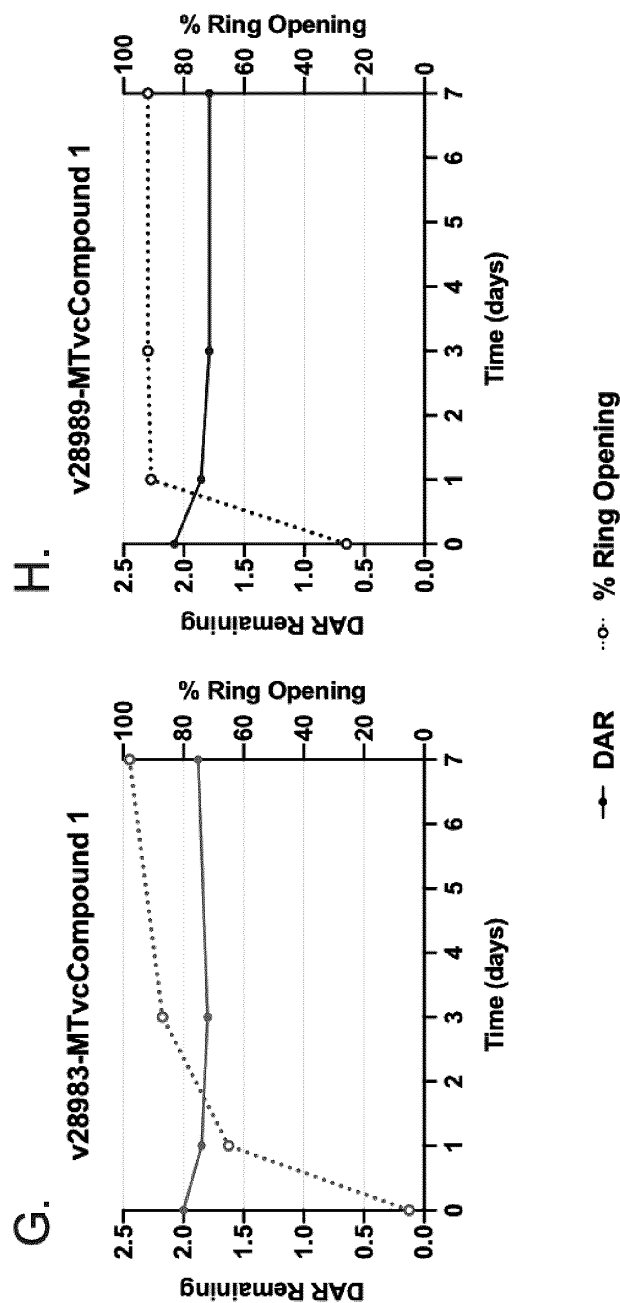


FIG. 3 (con't...)

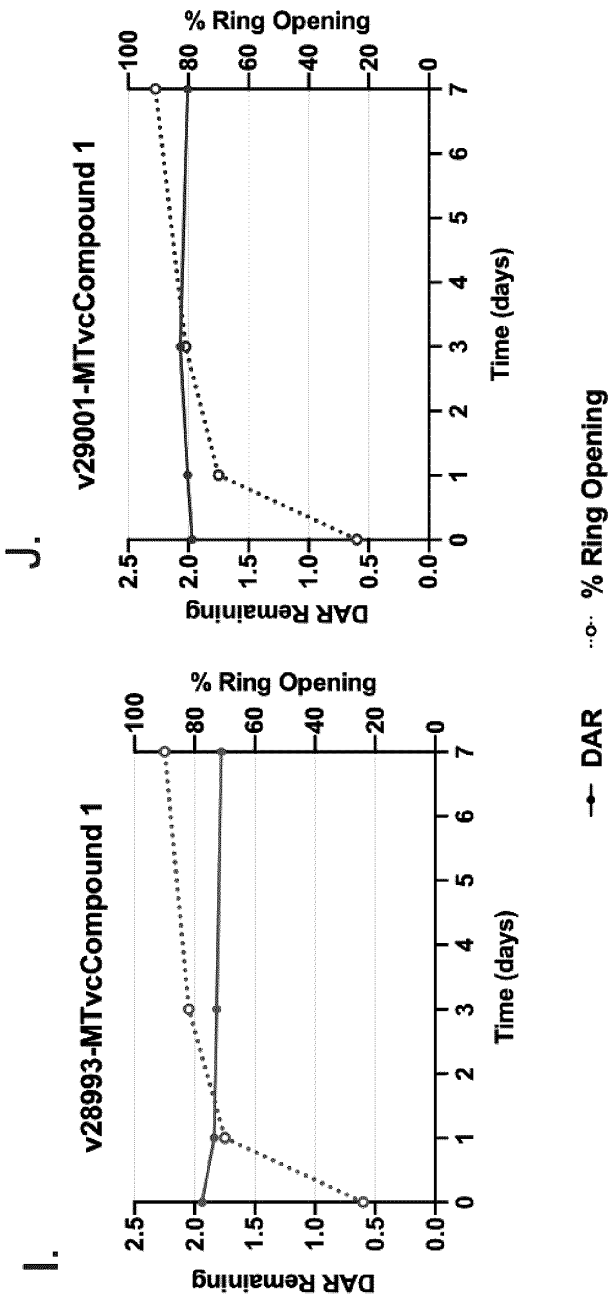


FIG. 3 (con't...)

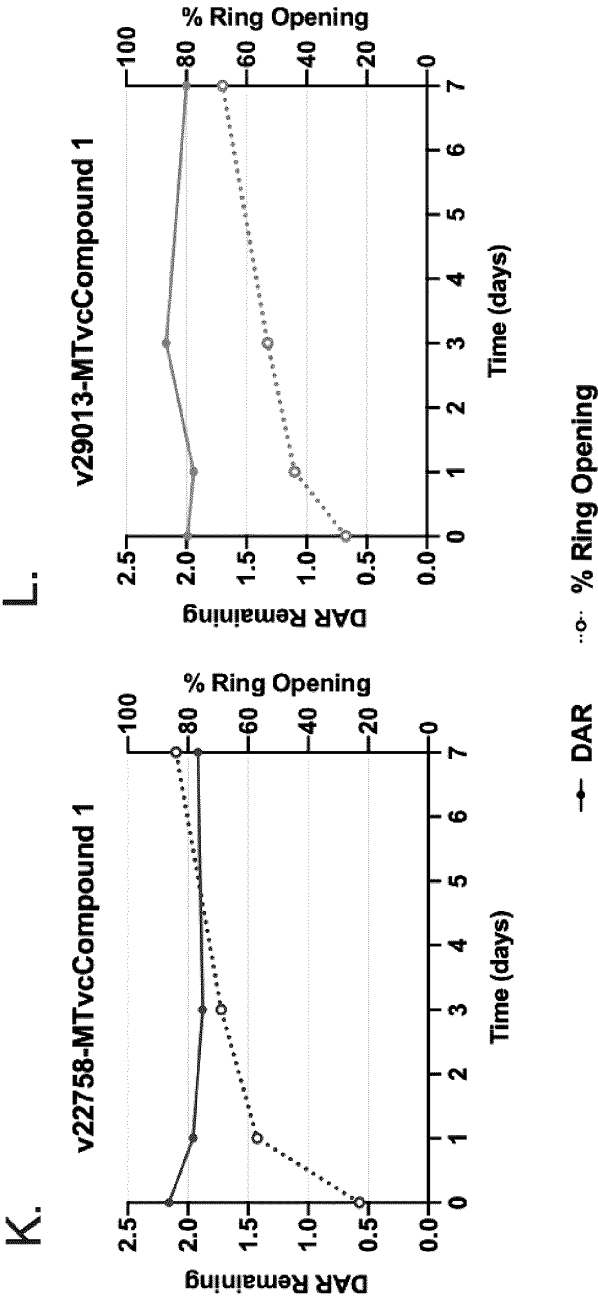


FIG. 3 (con't...)

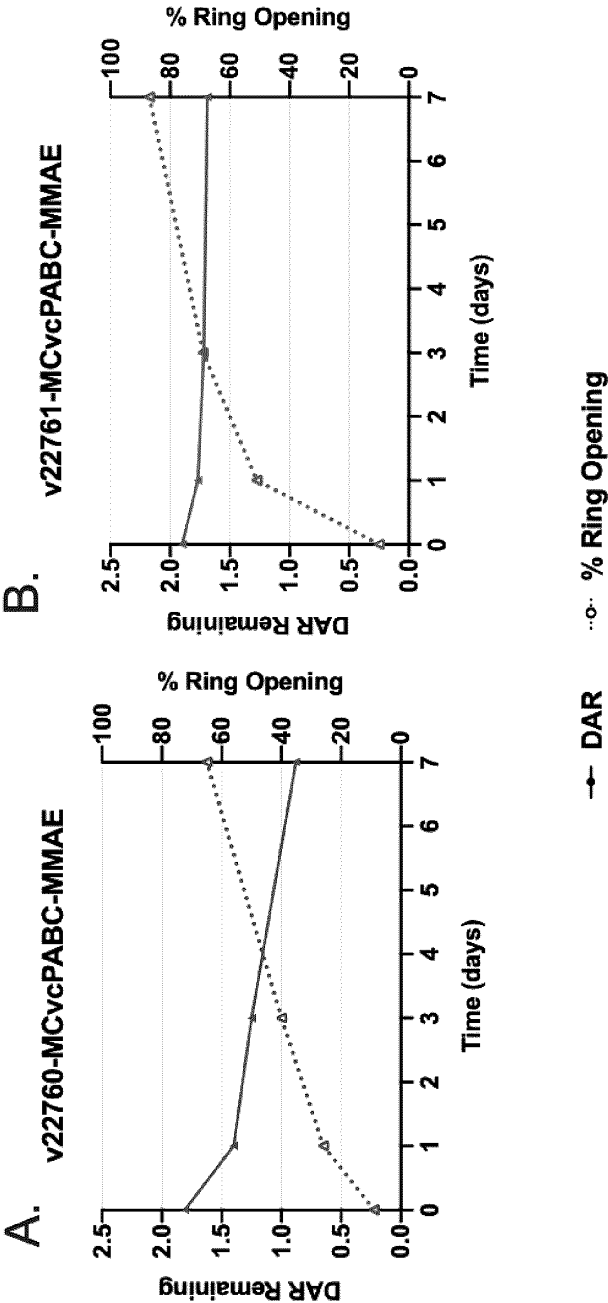


FIG. 4

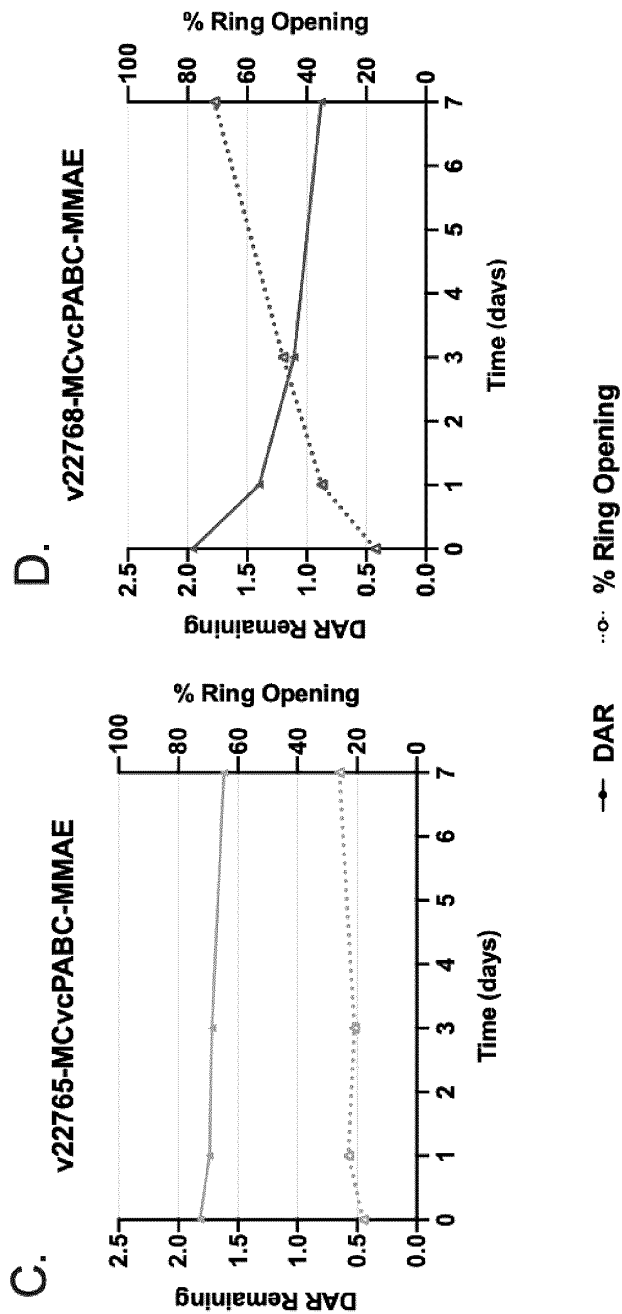


FIG. 4 (con't...)

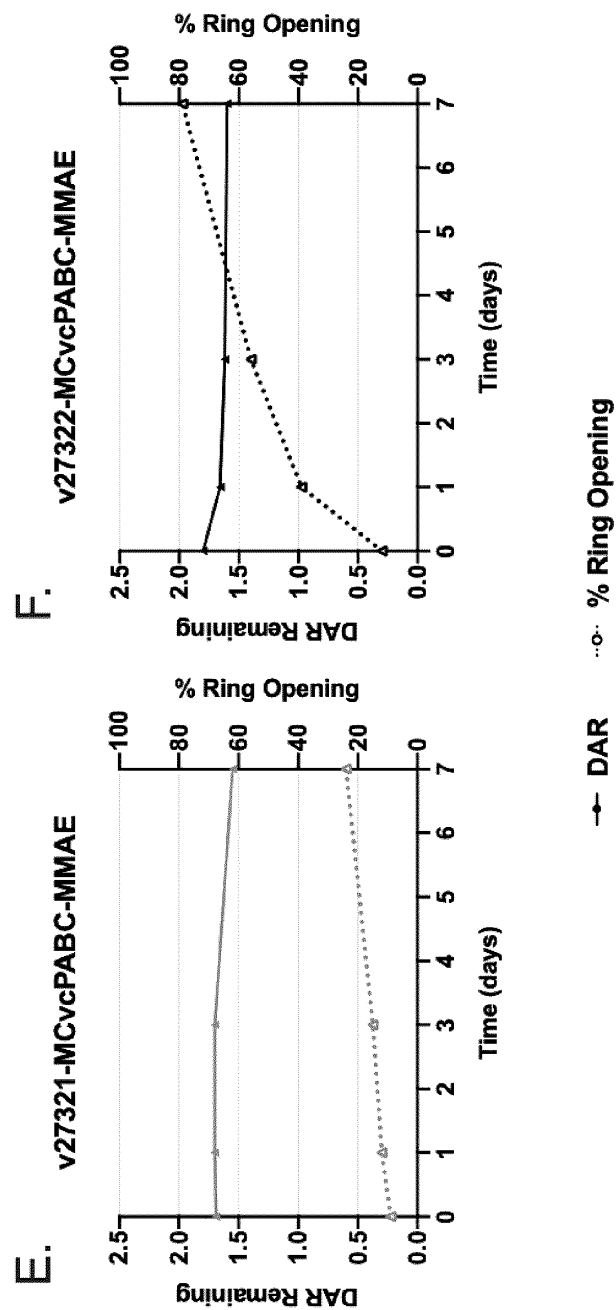


FIG. 4 (con't...)

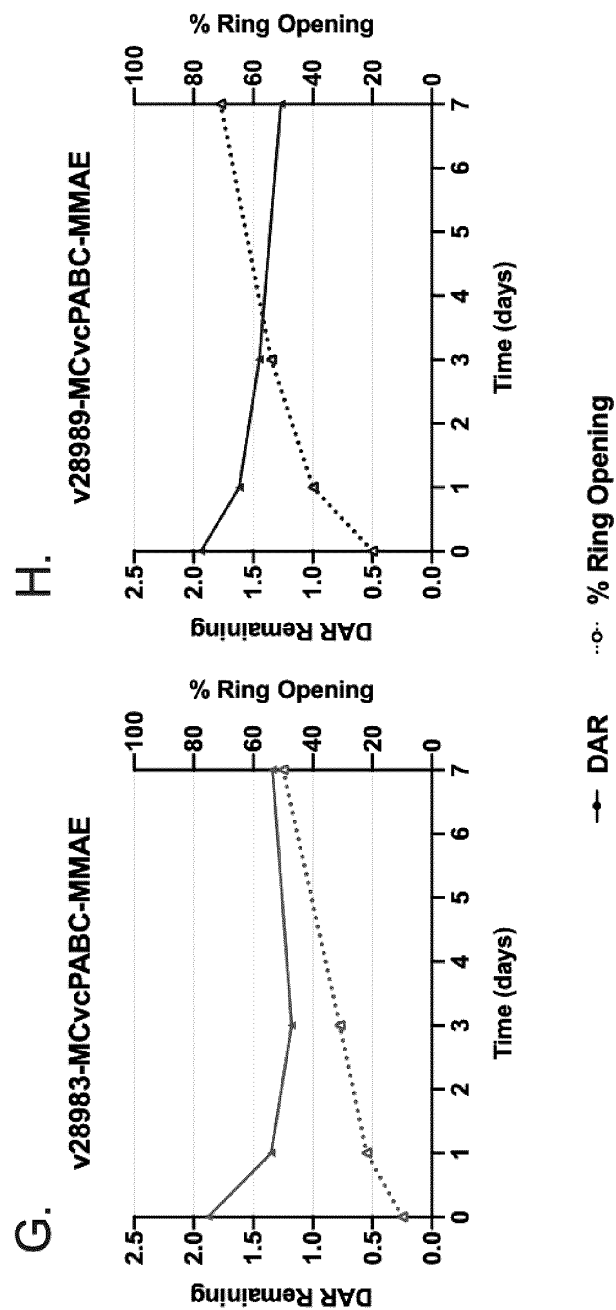


FIG. 4 (con't...)

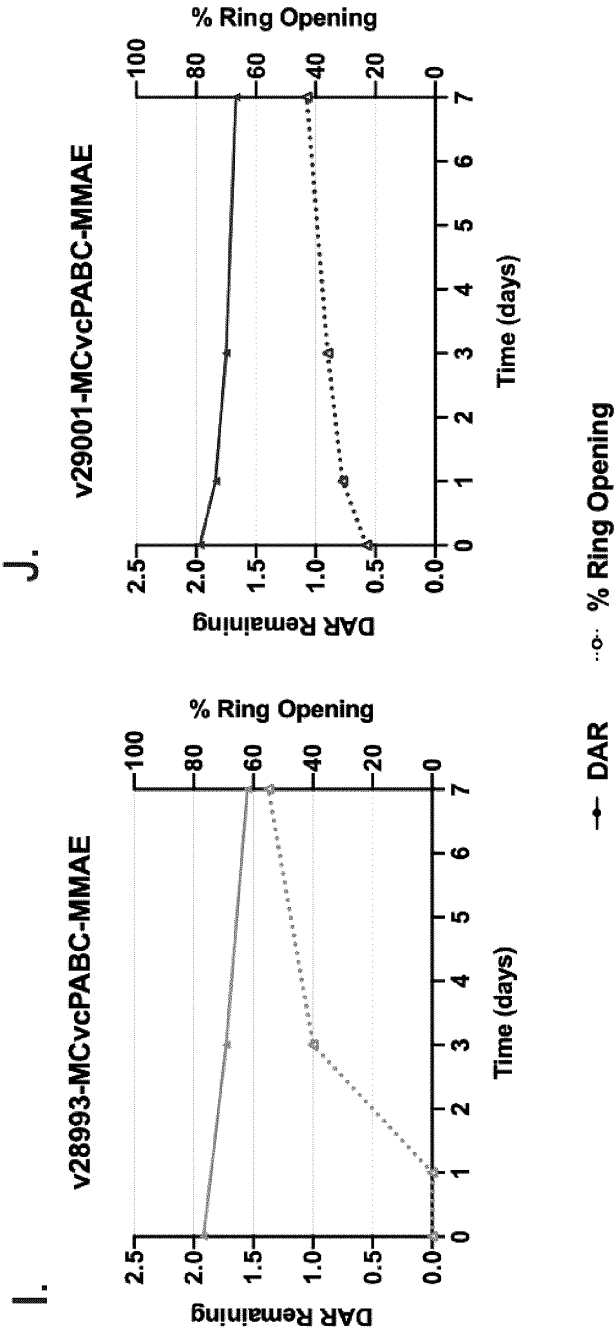


FIG. 4 (con't...)

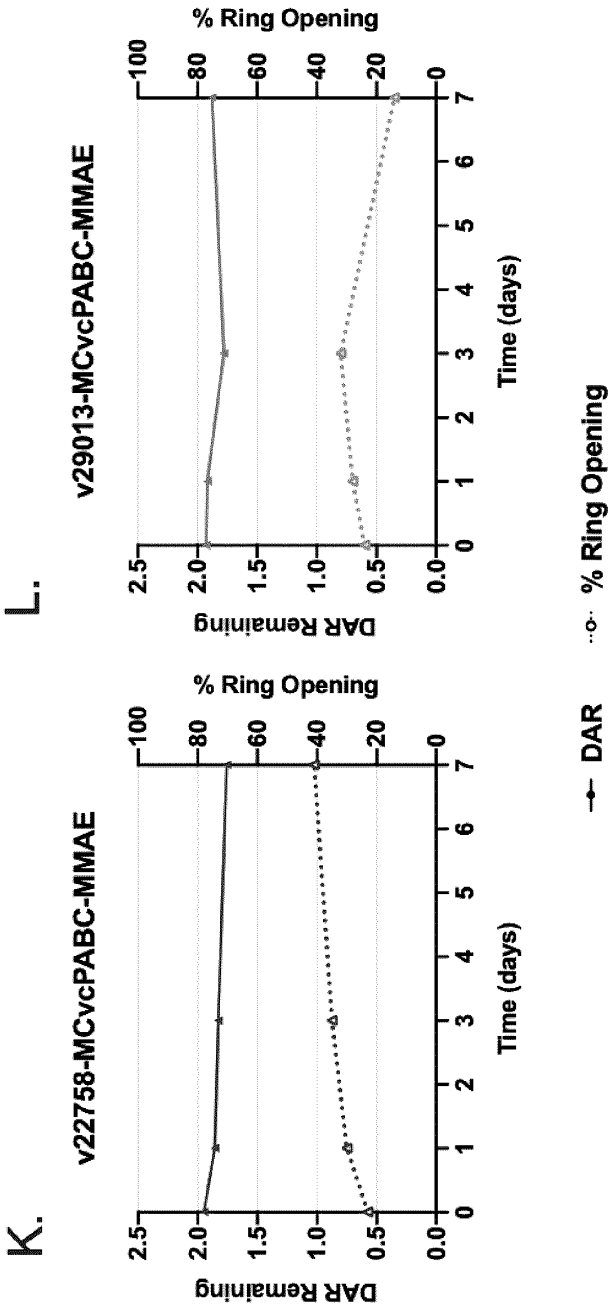


FIG. 4 (con't...)

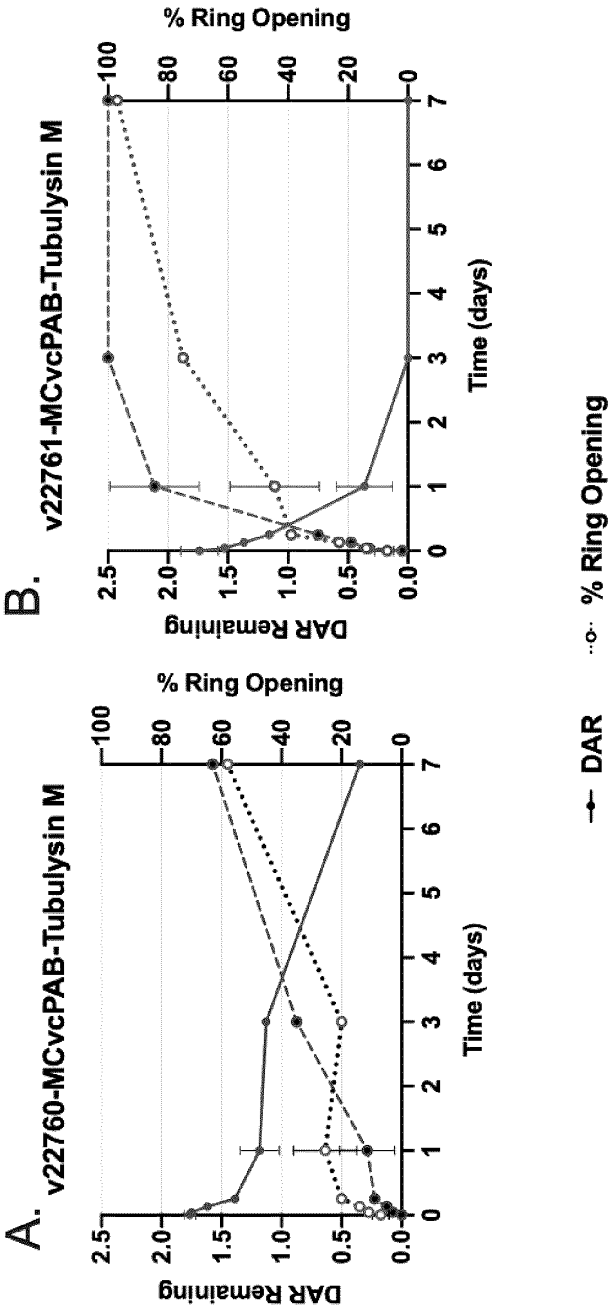


FIG. 5

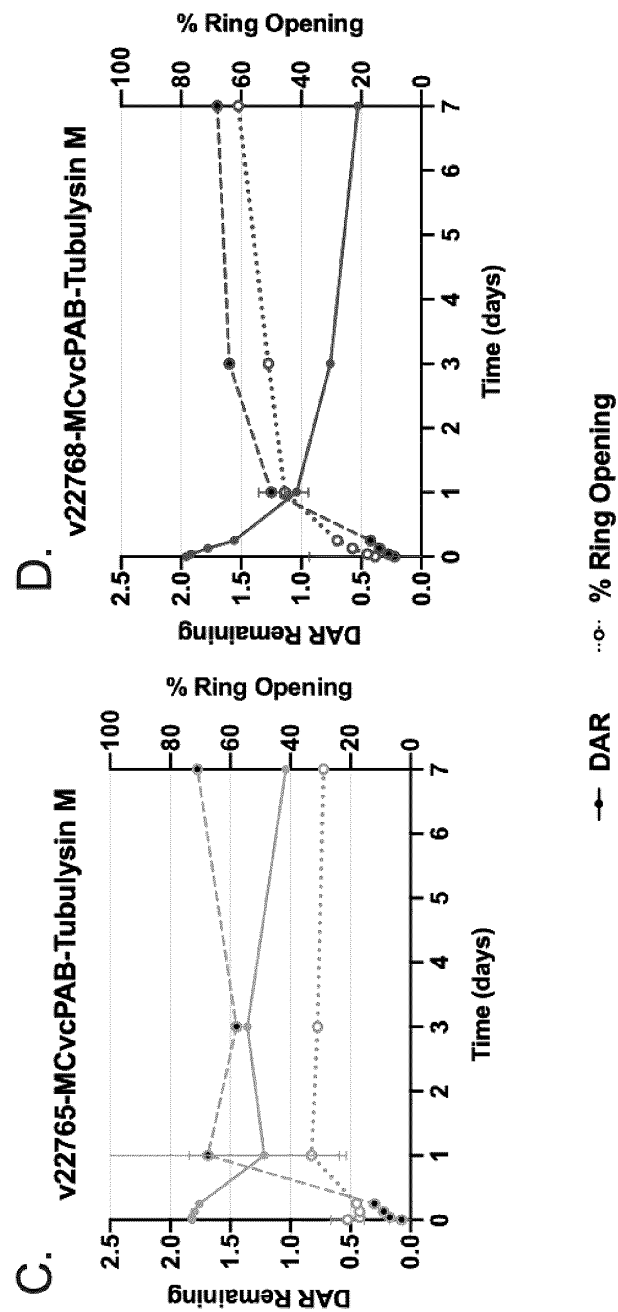


FIG. 5 (con't...)

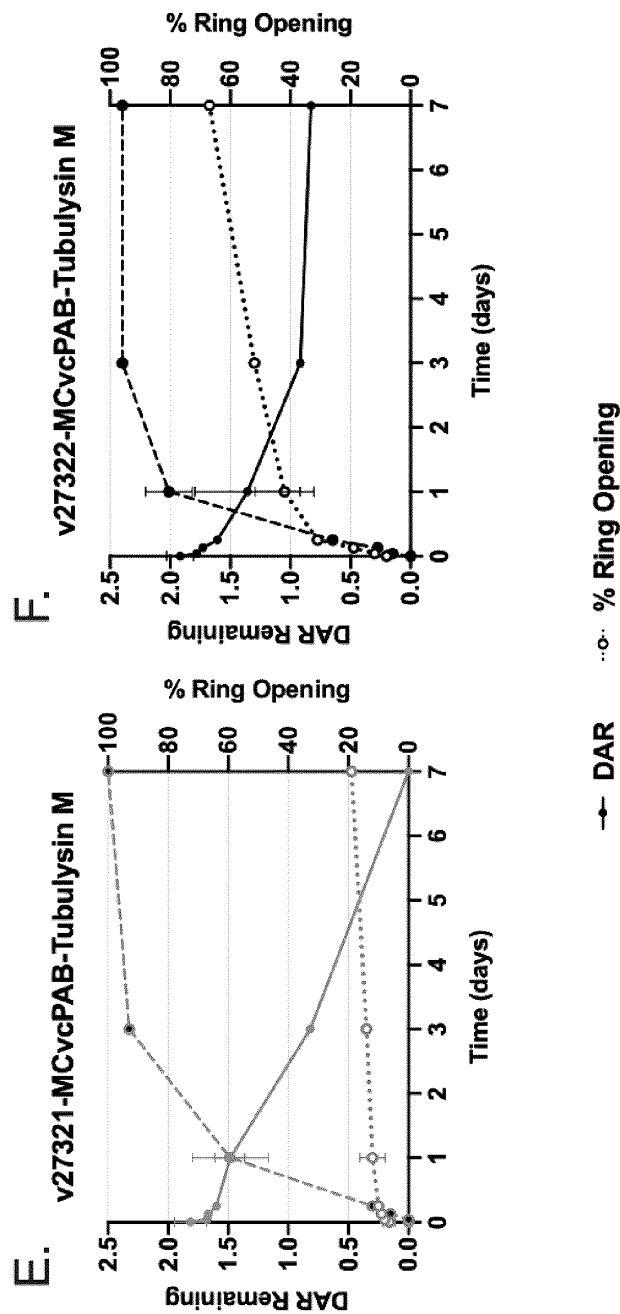


FIG. 5 (con't...)

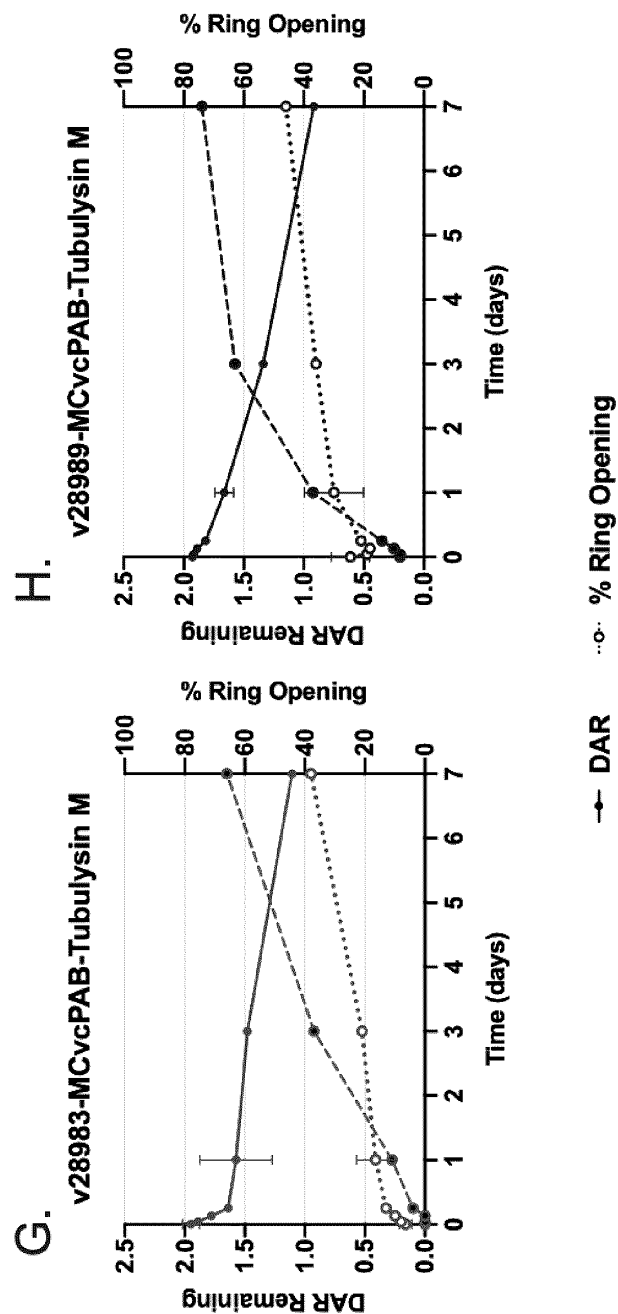


FIG. 5 (con't...)

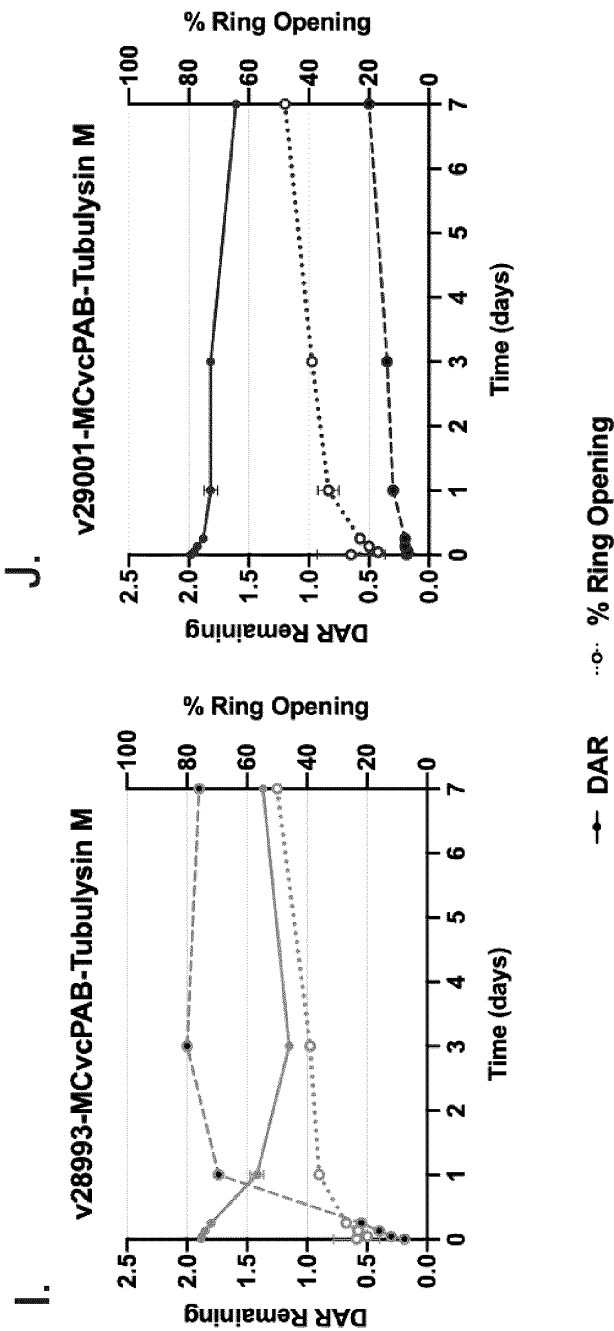


FIG. 5 (con't...)

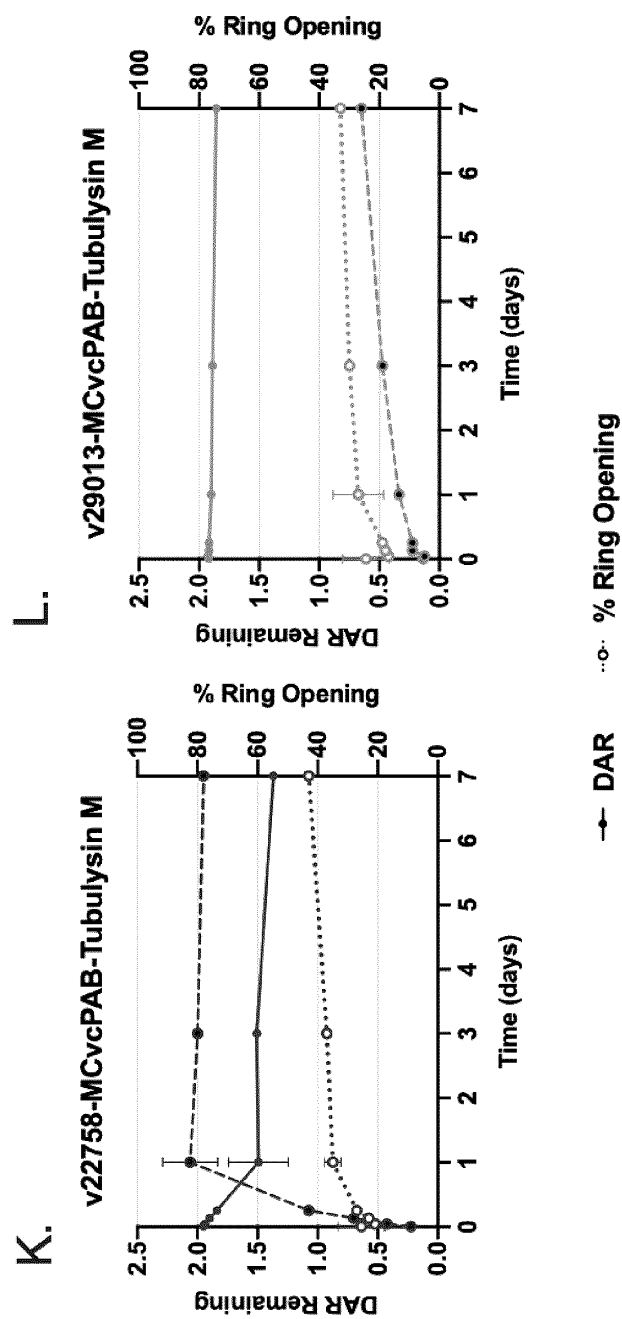


FIG. 5 (con't...)

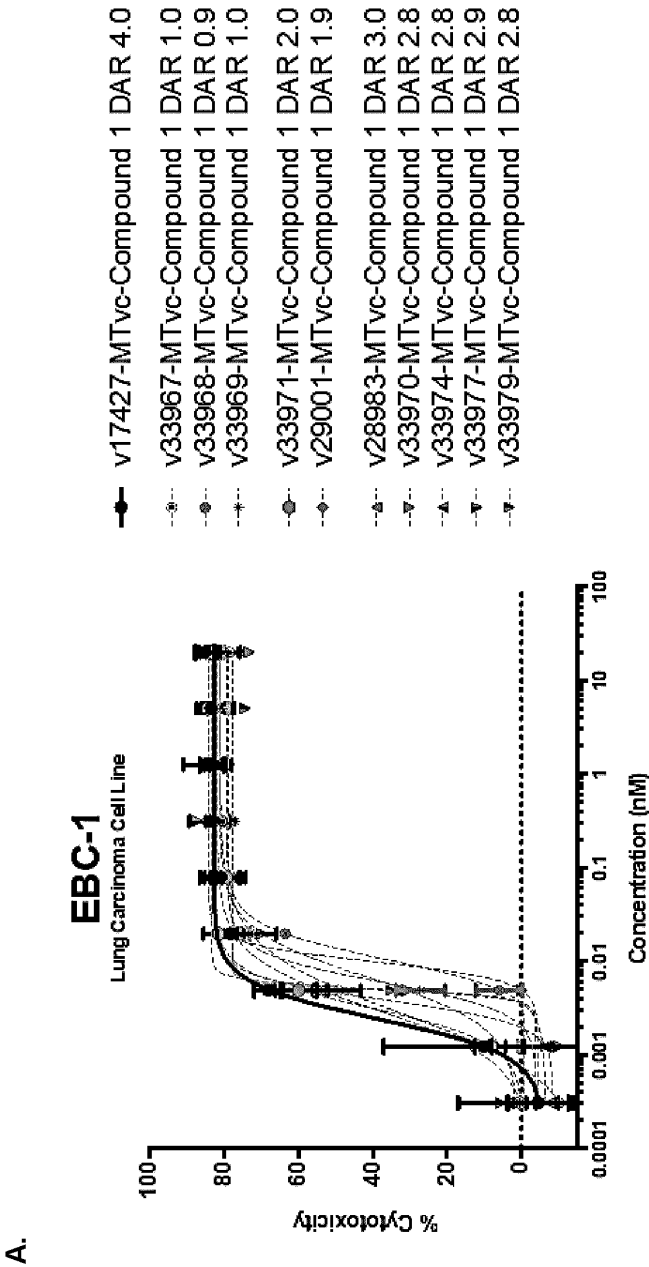


FIG. 6

B.

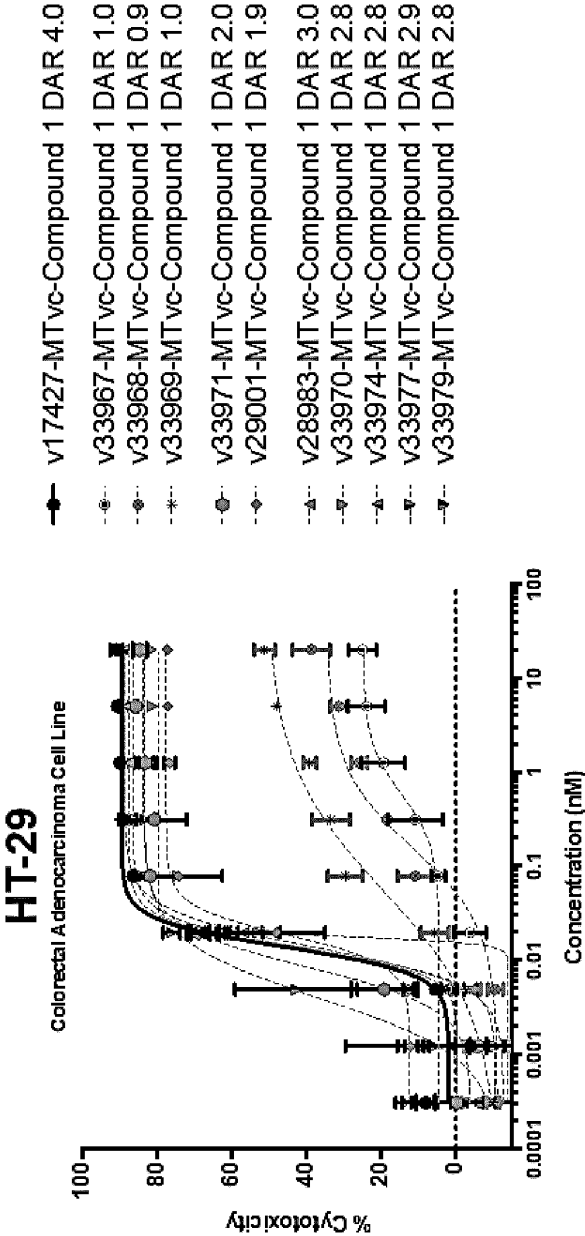


FIG. 6 (con't...)

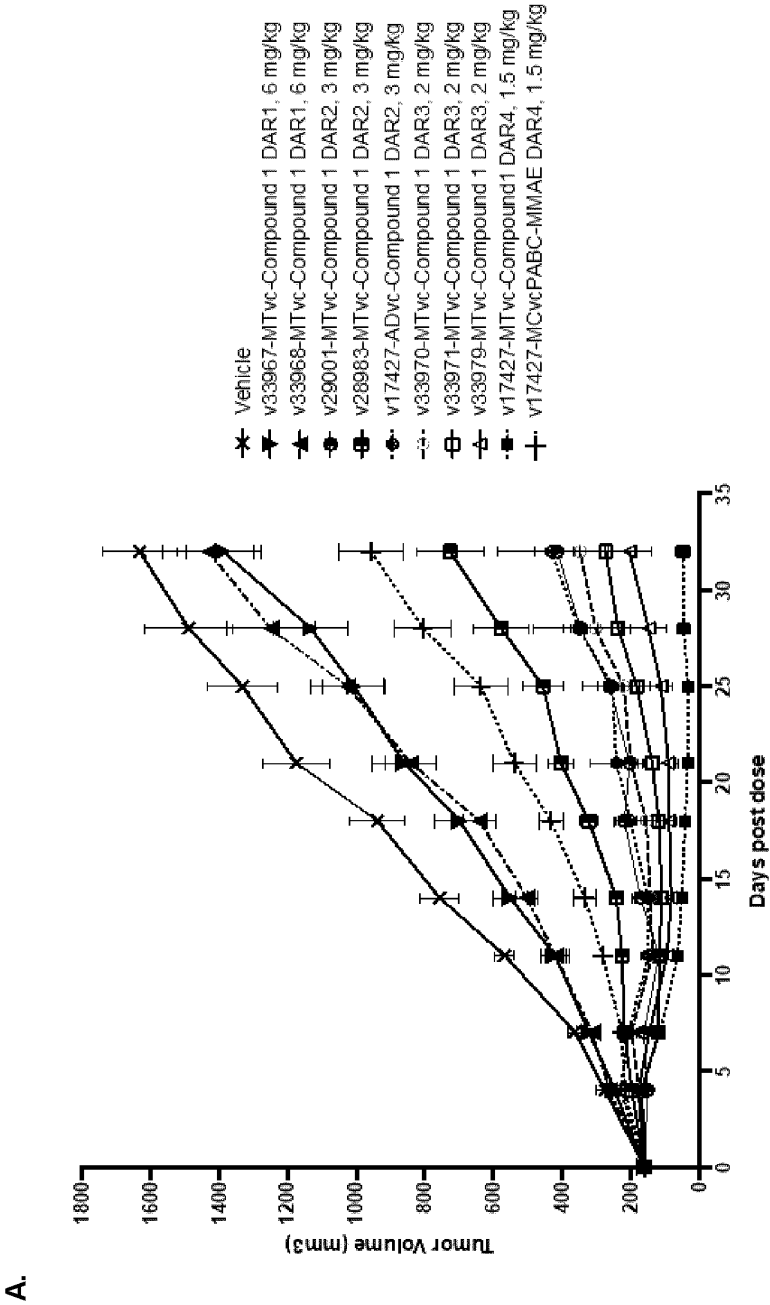


FIG. 7

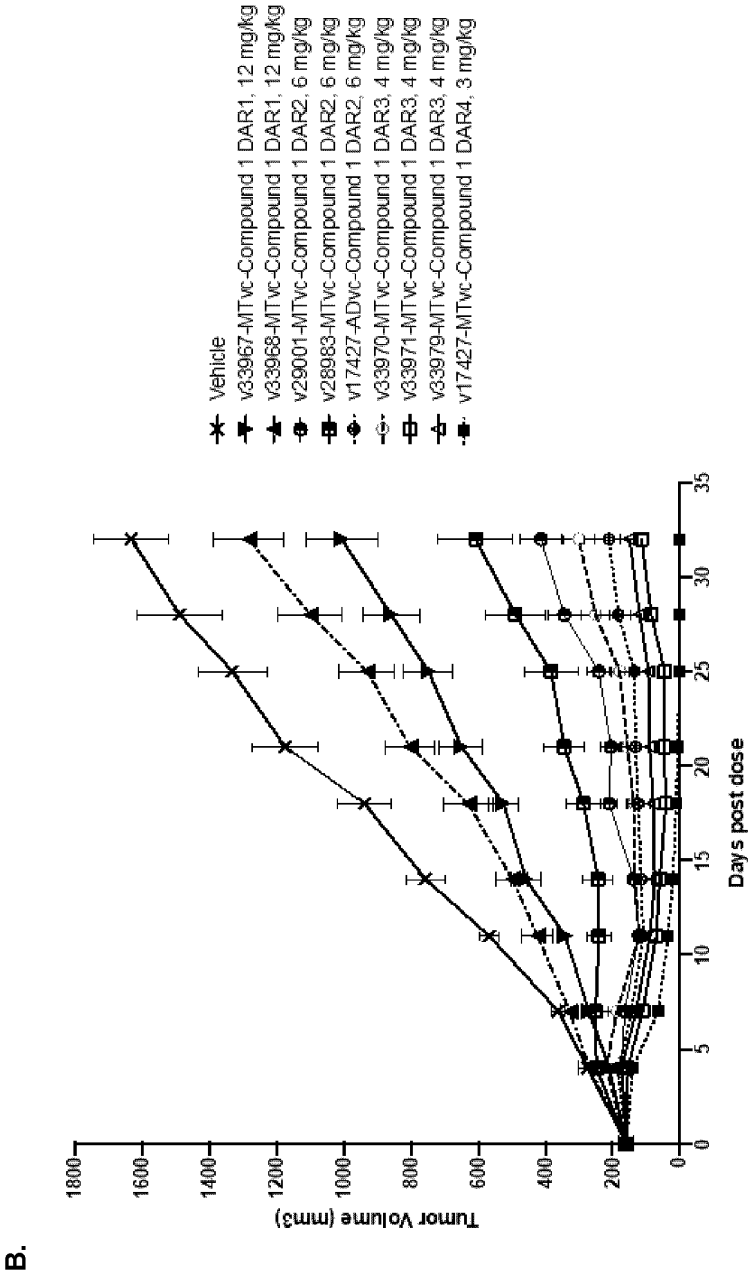


FIG. 7 (con't...)

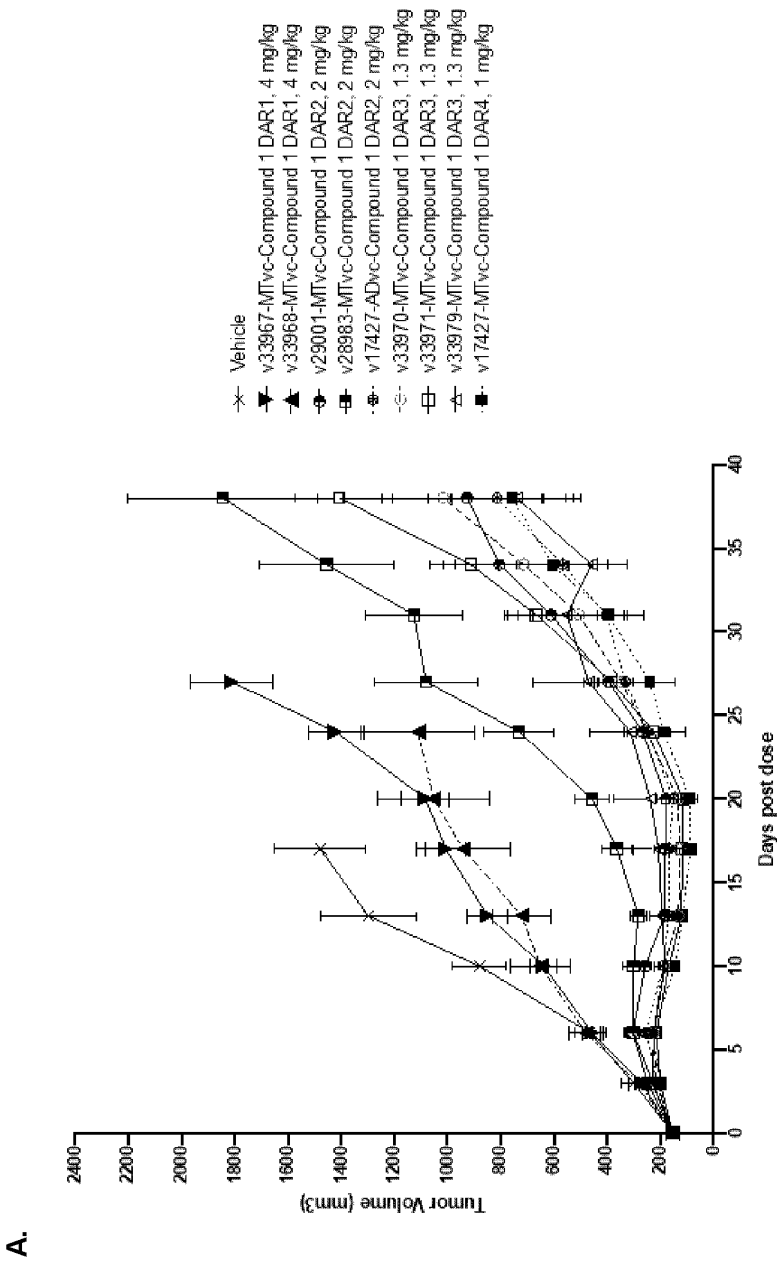


FIG. 8

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B.

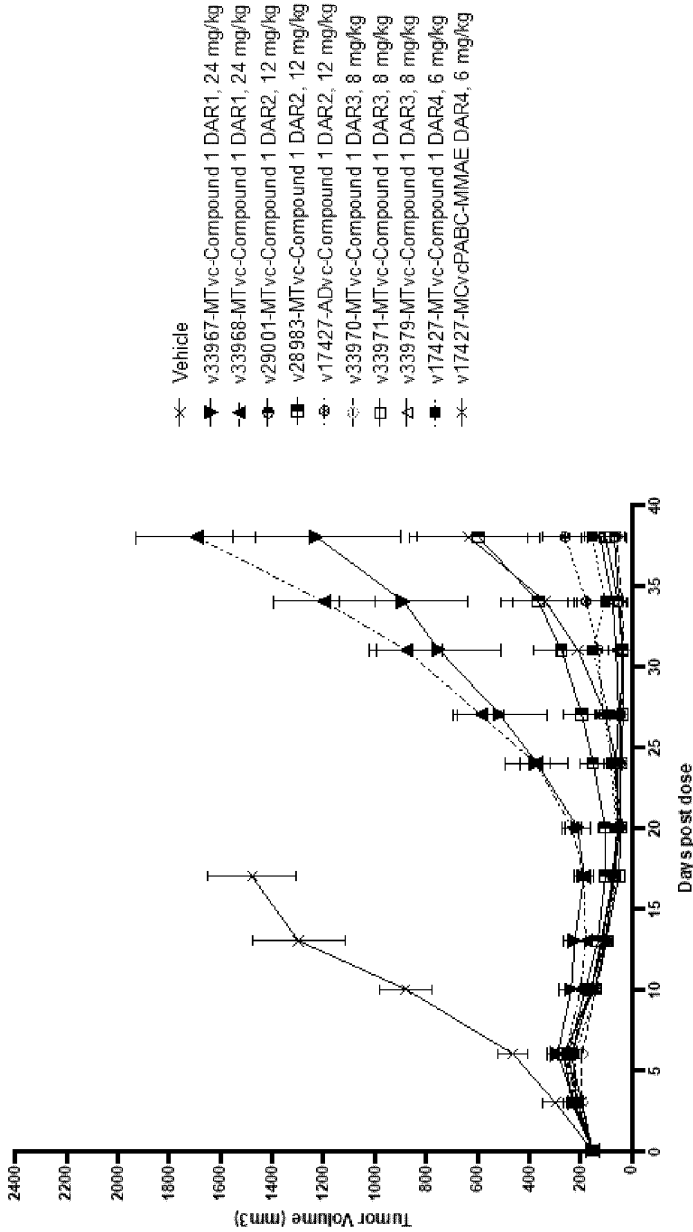


FIG. 8 (con't...)

|          |              |       |                                                              |
|----------|--------------|-------|--------------------------------------------------------------|
| IGHG1*01 | Homo sapiens | query | ASTKGPSVFPLAPSSKSTSGGTAAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u> |
| IGHG1*03 | Homo sapiens |       | ASTKGPSVFPLAPSSKSTSGGTAAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u> |
| IGHG3*01 | Homo sapiens |       | ASTKGPSVFPLAPSSKSTSGGTAAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u> |
| IGHG3*18 | Homo sapiens |       | ASTKGPSVFPLAPCSRSTSGGTAAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u> |
| IGHG3*17 | Homo sapiens |       | ASTKGPSVFPLAPCSRSTSGGTAAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u> |
| IGHG2*04 | Homo sapiens |       | ASTKGPSVFPLAPCSRSTSGGTAAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u> |
| IGHG4*01 | Homo sapiens |       | ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u>  |
| IGHG2*01 | Homo sapiens |       | ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u>  |
| IGHG2*02 | Homo sapiens |       | ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSMNSGALTS <u>GVH</u>  |
| IGHG1*01 | Homo sapiens | query | TFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKV               |
| IGHG1*03 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKV               |
| IGHG3*01 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRV               |
| IGHG3*18 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVPSSSLGTQTYTCNVNHKPSNTKVDKRV               |
| IGHG3*17 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVPSSSLGTQTYTCNVNHKPSNTKVDKRV               |
| IGHG2*04 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVPSSSLGTQTYTCNVNHKPSNTKVDKTV               |
| IGHG4*01 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVPSSSLGTQTYTCNVNHKPSNTKVDKRV               |
| IGHG2*01 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVPSNFGTQTYTCNVDHKPSNTKVDKTV                |
| IGHG2*02 | Homo sapiens |       | TFPAVLQSSGLYSLSSVTVTSSNFGTQTYTCNVDHKPSNTKVDKTV               |

FIG. 9

|          |              |                                                         |                                                         |
|----------|--------------|---------------------------------------------------------|---------------------------------------------------------|
| IGHG1*01 | Homo sapiens | query                                                   | APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN |
| IGHG3*01 | Homo sapiens | APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHN |                                                         |
| IGHG3*16 | Homo sapiens | APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFKWYVDGVEVHN |                                                         |
| IGHG3*09 | Homo sapiens | APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFKWYVDGVEVHN |                                                         |
| IGHG3*11 | Homo sapiens | APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFKWYVDGVEVHN |                                                         |
| IGHG3*14 | Homo sapiens | APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFKWYVDGVEVHN |                                                         |
| IGHG3*18 | Homo sapiens | APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFKWYVDGVEVHN |                                                         |
| IGHG4*01 | Homo sapiens | APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYVDGVEVHN |                                                         |
| IGHG4*02 | Homo sapiens | APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYVDGVEVHN |                                                         |
| IGHG2*01 | Homo sapiens | -APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYVDGVEVHN |                                                         |
| IGHG2*02 | Homo sapiens | -APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYVDGMEVHN |                                                         |
| IGHG1*01 | Homo sapiens | query                                                   | AKTKPREEQYNSIYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK  |
| IGHG3*01 | Homo sapiens | AKTKPREEQYNSIYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK  |                                                         |
| IGHG3*16 | Homo sapiens | AKTKPREEQYNSIFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKTK  |                                                         |
| IGHG3*09 | Homo sapiens | AKTKLREEQYNSIFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK  |                                                         |
| IGHG3*11 | Homo sapiens | AKTKPREEQYNSIFRVVSVLTVHQDWLNGKEYKCKVSNKALPAPIEKTISKTK   |                                                         |
| IGHG3*14 | Homo sapiens | AKTKPREEQYNSIFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKTK  |                                                         |
| IGHG3*18 | Homo sapiens | AKTKLREEQYNSIFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKTK  |                                                         |
| IGHG4*01 | Homo sapiens | AKTKPREEQYNSIFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKTK  |                                                         |
| IGHG4*02 | Homo sapiens | AKTKPREEQYNSIYRVVSVLTVHQDWLNGKEYKCKVSNKGLPSSIEKTISKAK   |                                                         |
| IGHG2*01 | Homo sapiens | AKTKPREEQYNSIFRVVSVLTVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTK   |                                                         |
| IGHG2*02 | Homo sapiens | AKTKPREEQYNSIFRVVSVLTVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTK   |                                                         |

FIG. 10

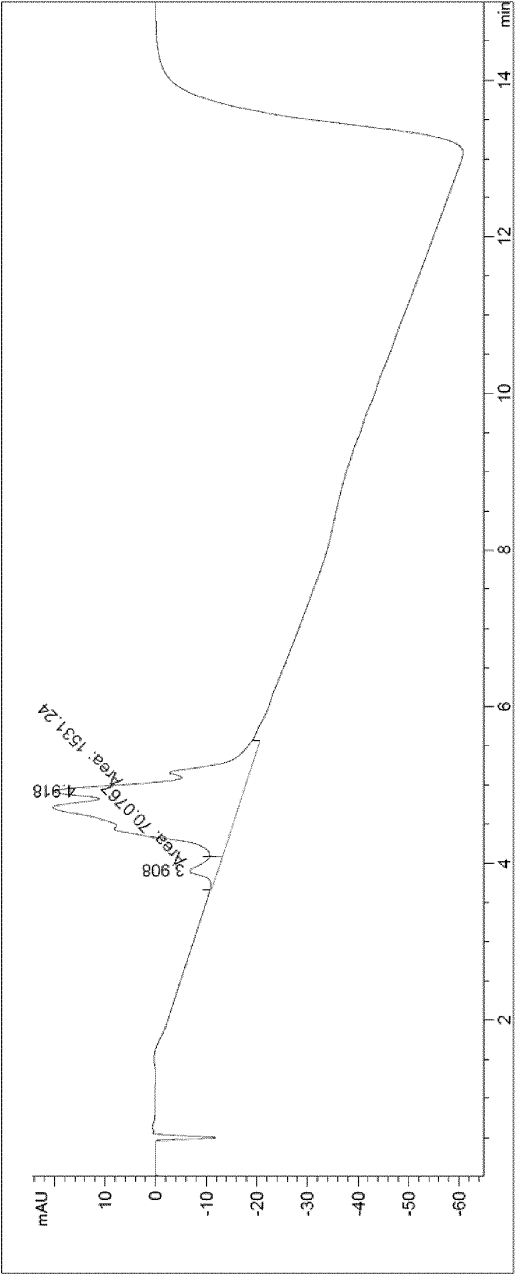
|          |              |       |                                                       |
|----------|--------------|-------|-------------------------------------------------------|
| IGHG1*01 | Homo sapiens | query | GQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG1*04 | Homo sapiens |       | GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG1*03 | Homo sapiens |       | GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG2*01 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG2*06 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*15 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*17 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG4*03 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*14 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG4*01 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*06 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*08 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*01 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*03 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG3*13 | Homo sapiens |       | GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT |
| IGHG1*01 | Homo sapiens | query | TPPVLDSDGSFALVSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG1*04 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG1*03 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG2*01 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG2*06 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*15 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*17 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG4*03 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*14 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG4*01 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*06 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*08 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*01 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*03 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |
| IGHG3*13 | Homo sapiens |       | TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPG |

FIG. 11

|          |              |       |                                                      |              |
|----------|--------------|-------|------------------------------------------------------|--------------|
| IGKC*01  | Homo sapiens | query | -RTVAAPSVFIIPPSPDEQLKSGTASVVCLLNFFYPREAKVQWKV        | DNALQSGNSQES |
| IGKC*04  | Homo sapiens |       | -RTVAAPSVFIIPPSPDEQLKSGTASVVCLLNFFYPREAKVQWKV        | DNALQSGNSQES |
| IGKC*05  | Homo sapiens |       | -RTVAAPSVFIIPPSPDEQLKSGTASVVCLLNFFYPREAKVQWKV        | DNALQSGNSQES |
| IGKC*02  | Homo sapiens |       | -RTVAAPSVFIIPPSPDEQLKSGTASVVCLLNFFYPREAKVQWKV        | DNALQSGNSQES |
| IGKC*03  | Homo sapiens |       | -RTVAAPSVFIIPPSPDEQLKSGTASVVCLLNFFYPREAKVQWKV        | DNALQSGNSQES |
| IGLC3*02 | Homo sapiens |       | GQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKA         | DSSPVKAG-VET |
| IGLC3*03 | Homo sapiens |       | GQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKA         | DSSPVKAG-VET |
| IGLC6*01 | Homo sapiens |       | GQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKA         | DGSPVNTG-VET |
| IGLC2*01 | Homo sapiens |       | GQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKA         | DSSPVKAG-VET |
| IGLC7*01 | Homo sapiens |       | GQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKA         | DGSPVKVG-VET |
| IGLC7*03 | Homo sapiens |       | GQPKAAPSVTLFPPSSEELQANKATLVCLISDFNPAGVTVAWKA         | DGSPVKVG-VET |
| IGLC1*02 | Homo sapiens |       | GQPKANPTVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKA         | DGSPVKAG-VET |
| query    |              |       |                                                      |              |
| IGKC*01  | Homo sapiens |       | VTEQDSKDSTYLSSTLTLSKADYKHKVYACEVTHQGLSSPVTKSFNRGEC-  |              |
| IGKC*04  | Homo sapiens |       | VTEQDSKDSTYLSSTLTLSKADYKHKVYACEVTHQGLSSPVTKSFNRGEC-  |              |
| IGKC*05  | Homo sapiens |       | VTEQDSKDSTYLSSTLTLSKADYKHKLYACEVTHQGLSSPVTKSFNRGEC-  |              |
| IGKC*02  | Homo sapiens |       | VTEQDSKDSTYLSSTLTLSKADYKHKVYACEVTHQGLSSPVTKSFNRGEC-  |              |
| IGKC*03  | Homo sapiens |       | VTEQESKDSTYLSSTLTLSKADYKHKVYAGEVTHQGLSSPVTKSFNRGEC-  |              |
| IGLC3*02 | Homo sapiens |       | VTEQESKDSTYLSSTLTLSKADYKHKVYACEVTHQGLSSPVTKSFNRGEC-  |              |
| IGLC3*03 | Homo sapiens |       | TPPSKQSNNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTV--EKTVAPTCS |              |
| IGLC6*01 | Homo sapiens |       | TPPSKQSNNKYAASSYLSLTPEQWKSHKSYSCQVTHEGSTV--EKTVAPTCS |              |
| IGLC2*01 | Homo sapiens |       | TPPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTV--EKTVAPECS |              |
| IGLC7*01 | Homo sapiens |       | TKPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTV--EKTVAPECS |              |
| IGLC7*03 | Homo sapiens |       | TKPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTV--EKTVAPECS |              |
| IGLC1*02 | Homo sapiens |       | TKPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTV--EKTVAPTCS |              |

FIG. 12

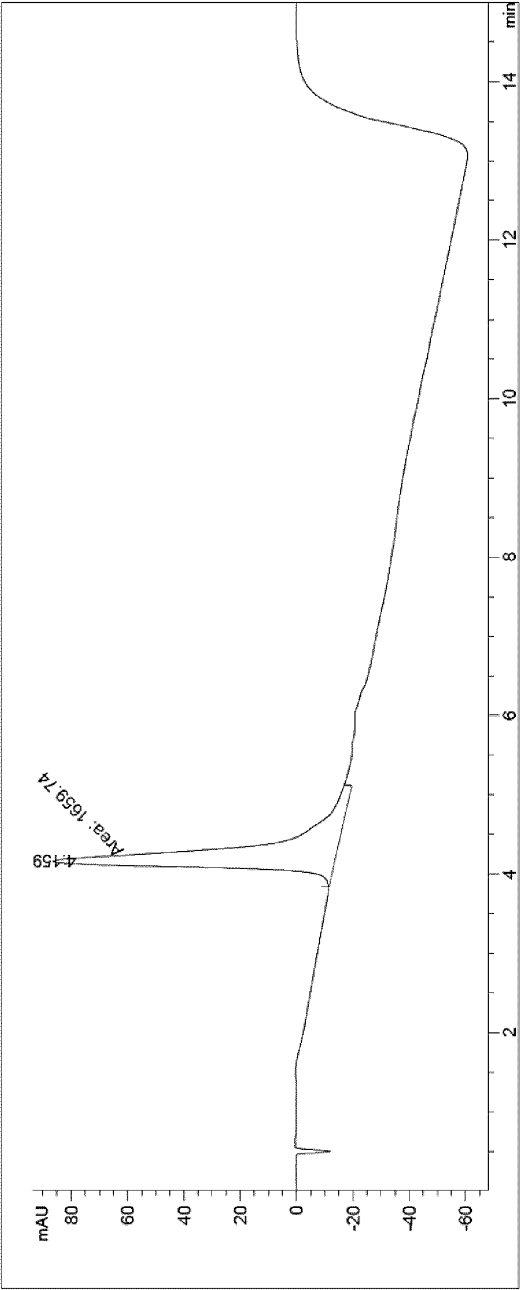
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A.

FIG. 13

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B.

FIG. 13 (con't...)

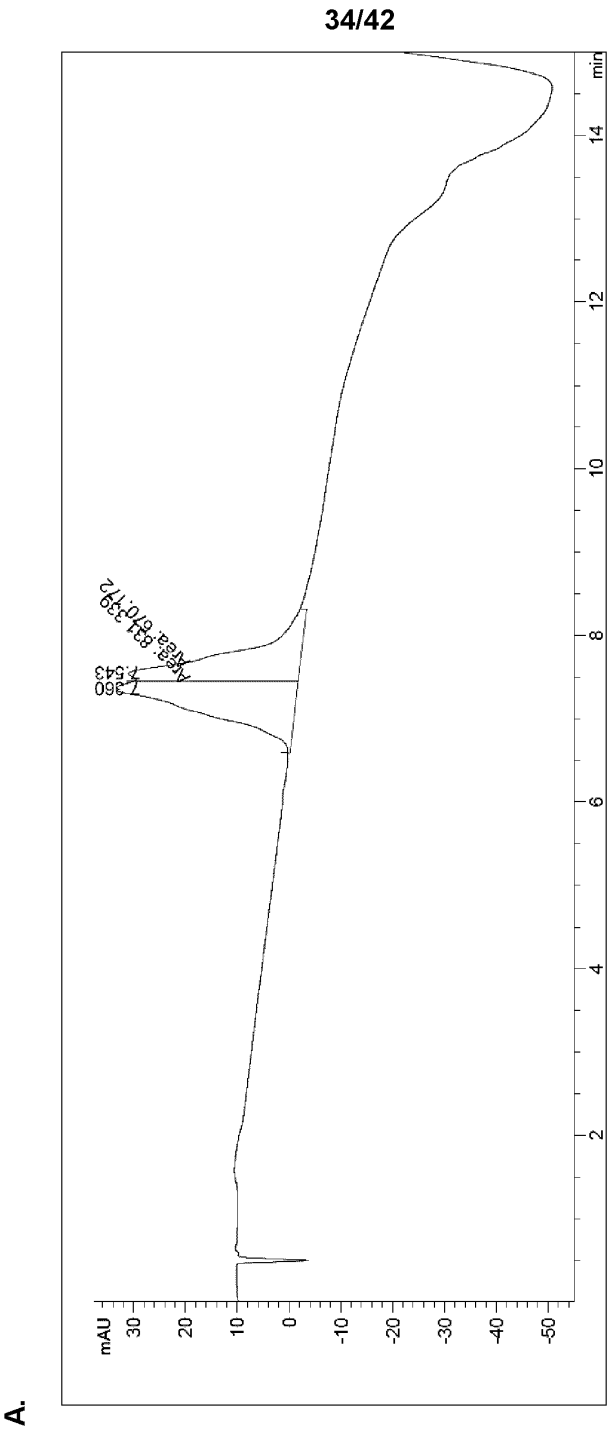


FIG. 14

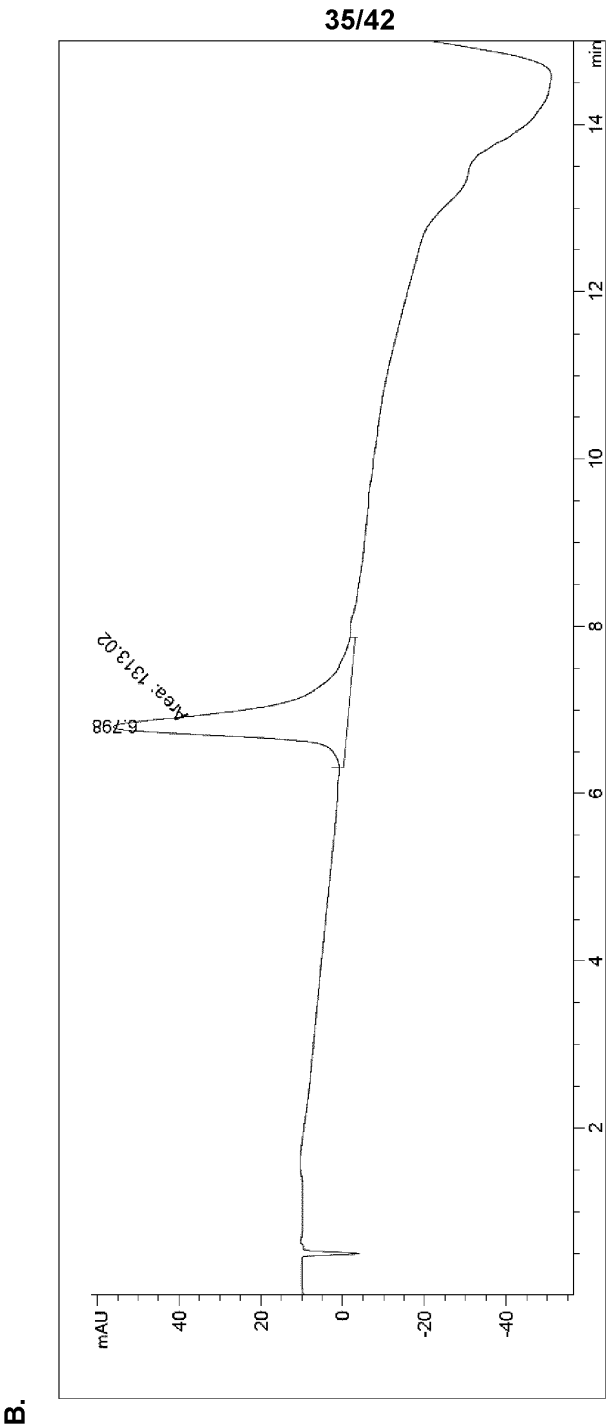
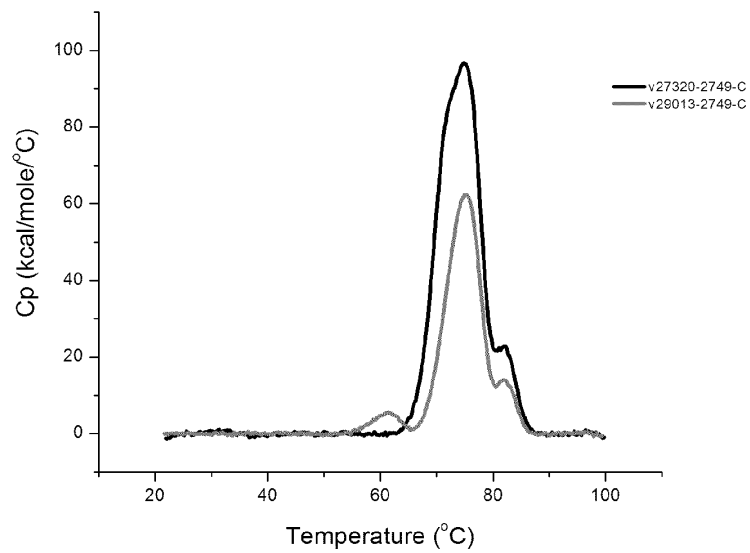
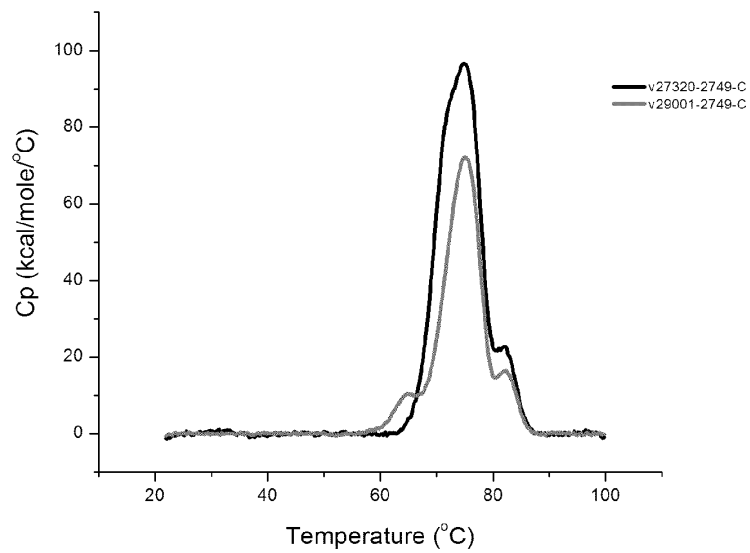


**FIG. 14 (con't...)**

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**A.****B.****FIG. 15**

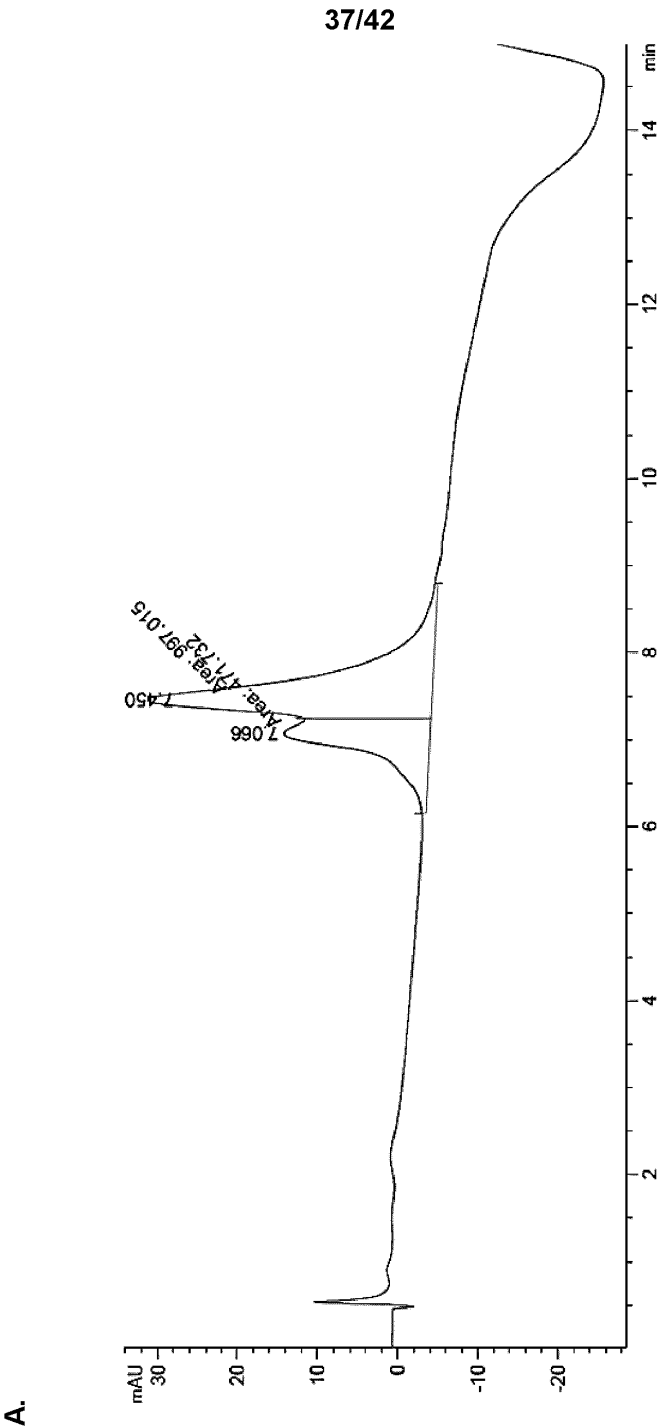


FIG. 16

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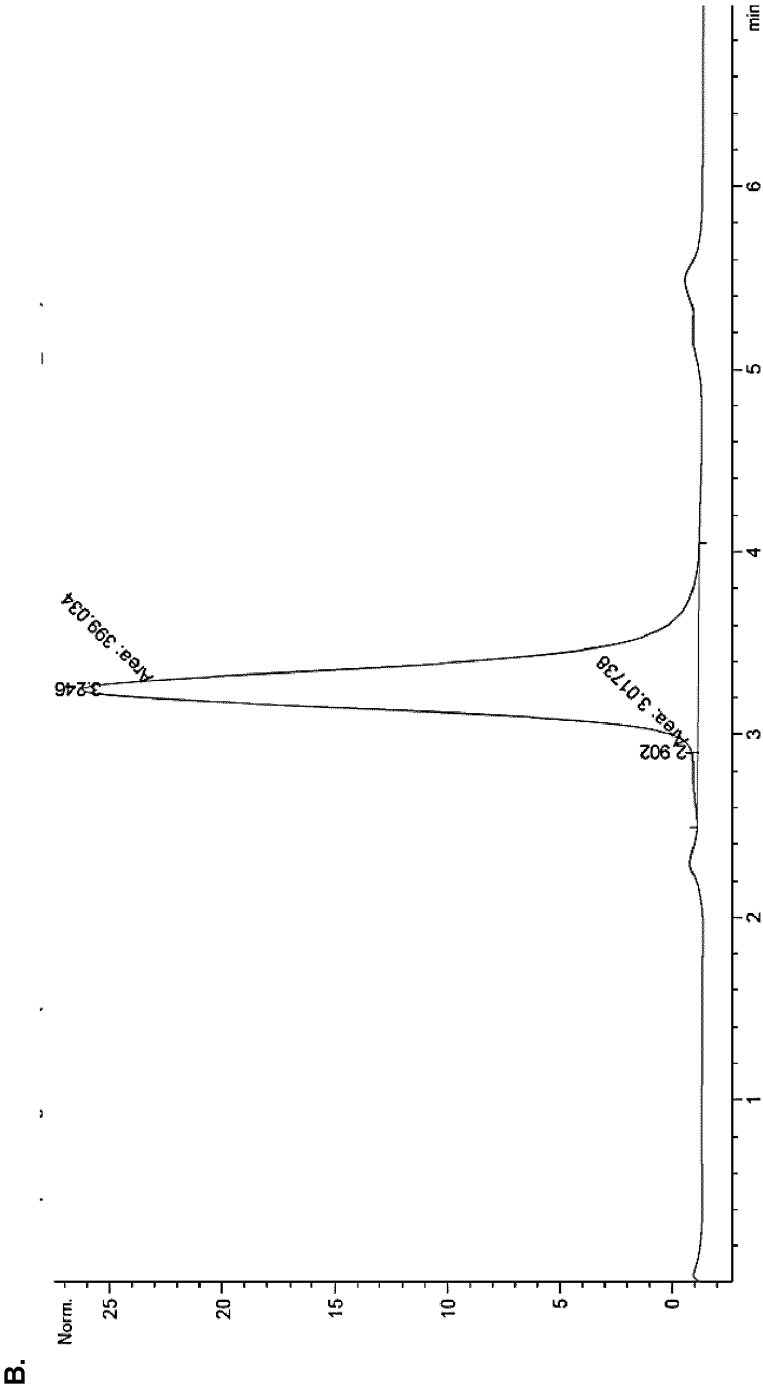


**FIG. 16 (con't...)**

A.

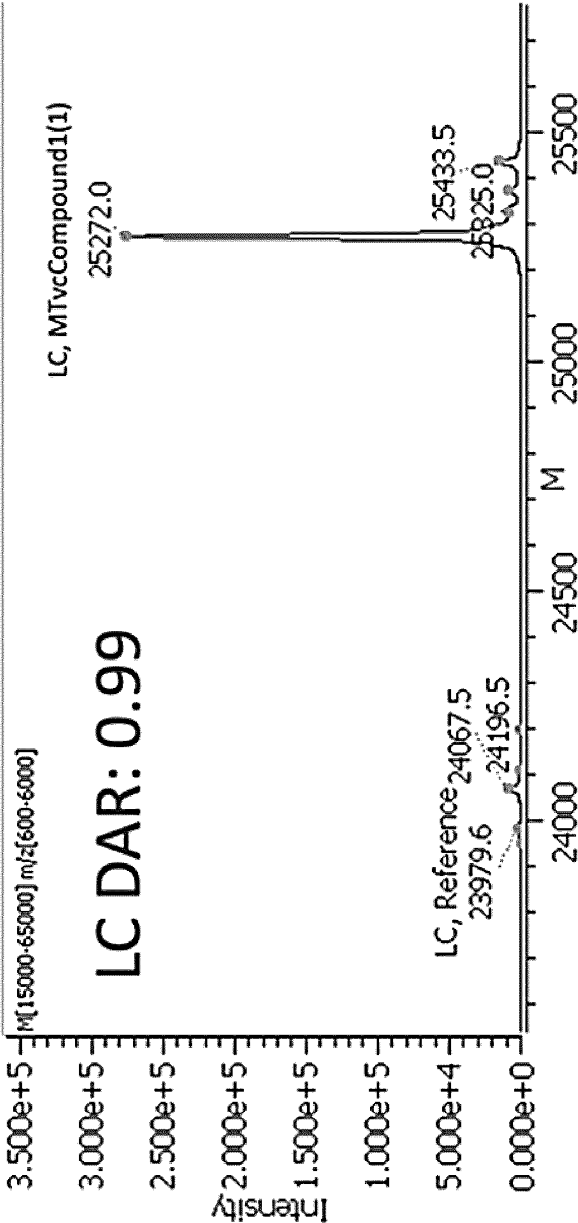


FIG. 17

B.

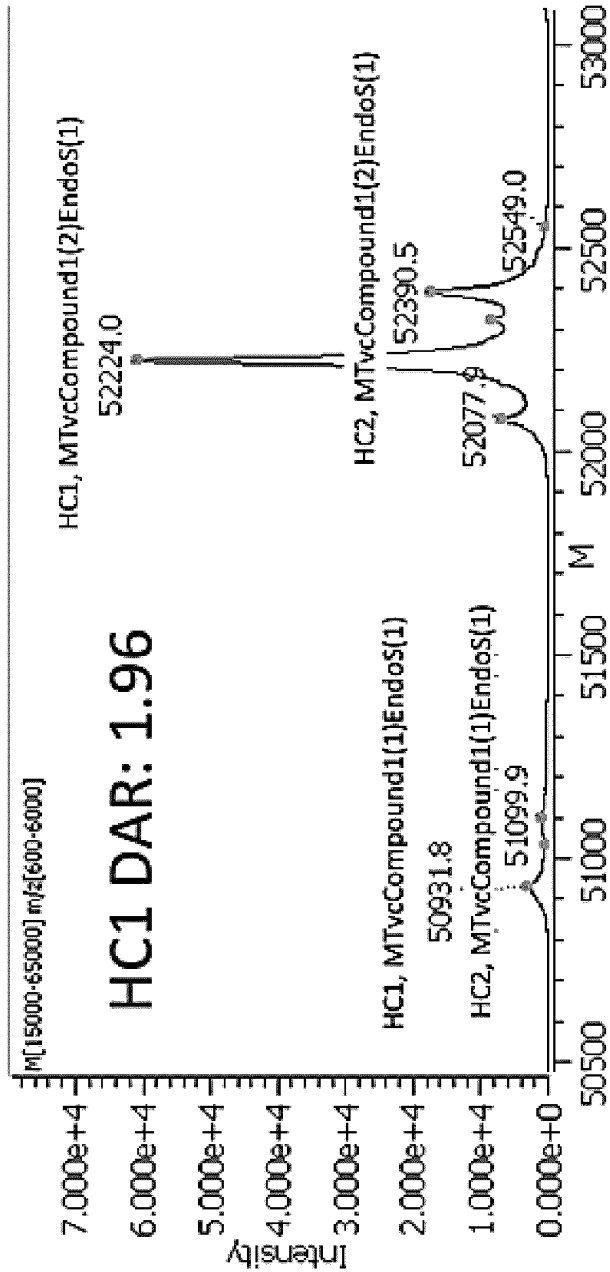


FIG. 17 (con't...)

C.

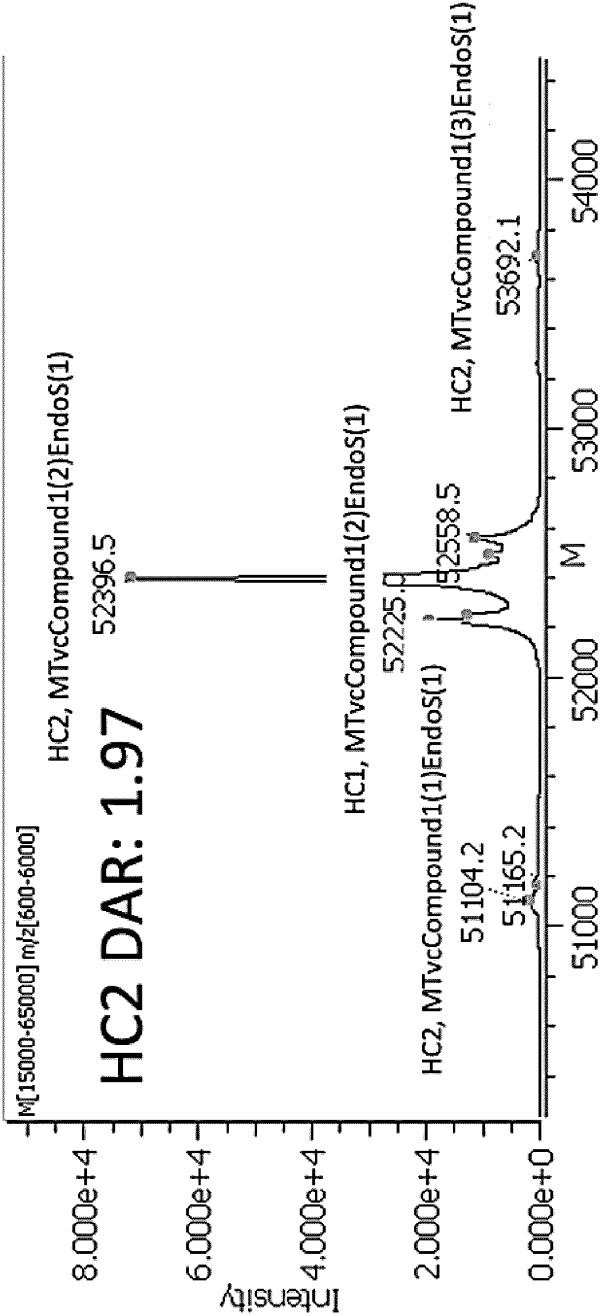


FIG. 17 (con't...)

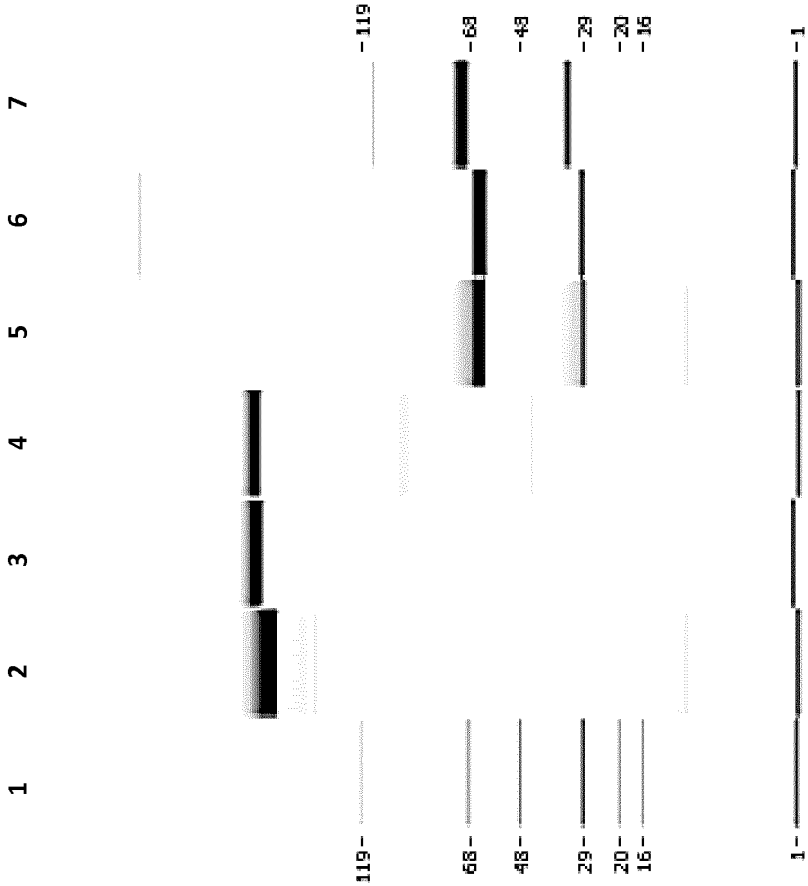


FIG. 18