

Streptococcus pyogenes Cas9
GenBank AKP81606

1 mdkkysgld lqtnsvqwar 3 eddykvpak kfkvlqntdr hskknliga lldsqetae
61 atrlkrtarr rvttrkrnc vleeifnem akvdsffhr leesflveed kherhpiq
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301 llsdlirvnt eitkaplsas mikrydehhq dltlkalvr qqlpekykei ffdqskngya
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421 ailrrqedfy pflkdnreki ekiltfripy yvgplargns rfaamtrkae etitpwnfee
481 vvdkgasaqs ffermtndsk nlpnekvlpk hsllyeyftv yneltkvkyy tegmrkpafl
541 egeqkkaivd llfktntkvt vxqikedyfk kiecfdsvei sgvedrfnas lgyhdllki
601 ikdkdfldne enedillediv ltlclfedre mieerlktya hlfdkvmkq lkrzytgwq
661 rlsrkllngl rdkqsgktll dzlkadqan rnfmlhdd sltckedlqk aqvsgqgdsal
721 hehianlags palkkailor vkvedeluvk mrrhkperfv lemdkrrate qkcknsaror
781 mkrlecgike lgsqllkehp ventqlqnek lylyylqngr dmyvdqeldi nrladyhvch
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901 tkæergglse ldkagfkrq lvetrqtkh vaqildsrnn tkydendkli revkvitks
961 klvedfrkdf qfykvreinn yfnahasyjn avgtalikk ypklesefvy gdykvydurk
1021 miakseqcig katakyffys nlmnfktei tlangeirkr plietngotg elvdkgrdz
1081 atvrkulamp qvnlvkktev qtqgfskesi lpknsdkli arkkdwdpkk yqgfsdptva
1141 ysvlvvæke kgkskklæv keligitime ræfeknplid flæakgykev kkdlliklpk
1201 yelfelengr krmlasagel qkgnelalps kyvnflylas hyeklkgspe dneqqlfve
1261 qhkhyldell eqisefskrv lledanldkv lsaynkhrdk pîreqaenli hiftitniga
1321 paafkyfdte ldrkrytsk evldatllhq sitglyetri dlsqlggd

Motif 1

Domain 1

Motif 2

Motif 3

Domain 2

Motif 4

FIG. 1

Francisella tularensis subsp. novicida U112 Cpf1

1 msiyqefvnk yslsktlrfe lipqgkltlen ikarglildd ekrakdykka kqildkyhqf
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 181 gfhenrknvy sandiptsli yrivddnlpk flenkakyes lkdapeain yeqikkdlae
 241 eltfddidyt sevngrvfl devfeianfn nylngsgitk fntliiggkfv ngentkrkgi
 301 neyinlysqq indktlkkk msvlfkqils dtesksfvid kleddsdvvt tngsfyeqia
 361 afktveeksi ketlsllfdd lkaqklslk iyfikndkslt dlsqgvfddy svigtavley
 421 itqqiapkn1 dnpskkeqel iakktakay lsletiklal eefnkhrdid kqcrfeeila
 481 nfaaipmifd eiaqnkdnla qisikyngqg kkdllqasae ddvkaikdli dqtannllhkl
 541 kifhisqsed kanildkdeh fylvfeecyf elanivplyn kirnyitqkp ysdekfklnf
 601 enstlangwd knkepdntai lfikddkyy1 gvmnkknki fddkaikenk gegykkivvy
 661 llpgankmlp kvffsaksik fyngsedilr irnhsthtkn gspqkyekf efniedorkf
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 841 ithpakeaia nknkdnpkke svfeydlikd krftedkfff hcpitinfks sgankfndei
 901 nllllekand vhlisidrg rhlayytlvd gkgnlikqdt fnligndrmk tnyhdklaai
 961 ekdrdsarkd wkkinnikem kegylsqvvh eiaklvieyn aivvfedlnf gfkgrfkve
 1021 kqvyqklekm lieklnylvf kdnefdktgg vlrayqltap fetfkkmgkq tgliyyvpag
 1081 ftskicpvtg fvnqlypkye svksqeffs kfdkicynld kgyfefsfdy knfgdkaakg
 1141 kwtfiasfgr linfrnsdkn hnwdtrevyp tkelellkd ysieyghgec ikaaigcesd
 1201 kkffakltsv lntilqmrns ktgteldyli spvadvnqnf fderqapkm pqdadangay
 1261 higlkglm11 griknnggk kinliviknee yfefvqmrn

FIG. 2

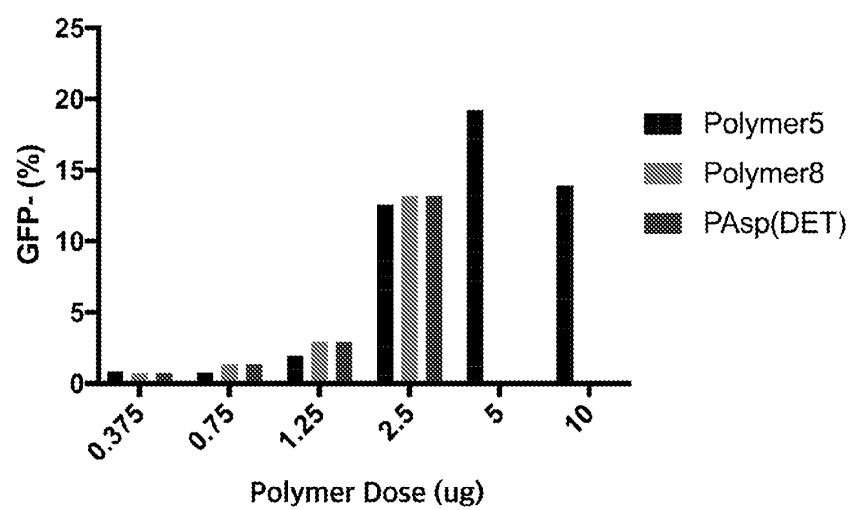


FIG. 3

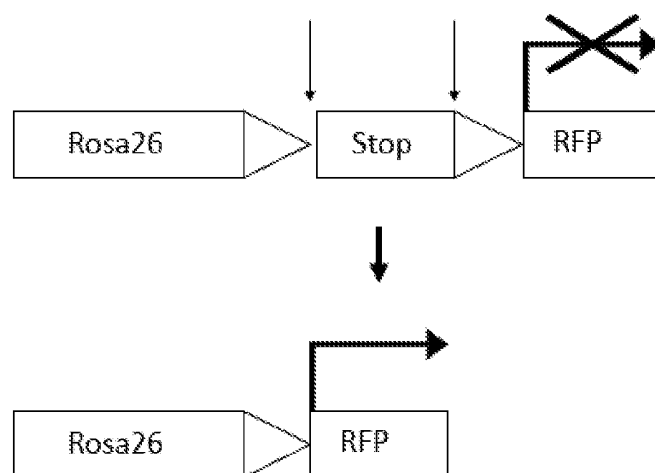


FIG. 4

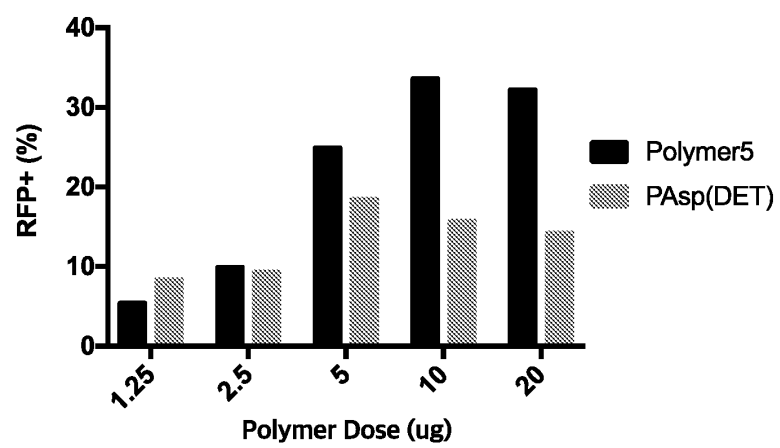


FIG. 5

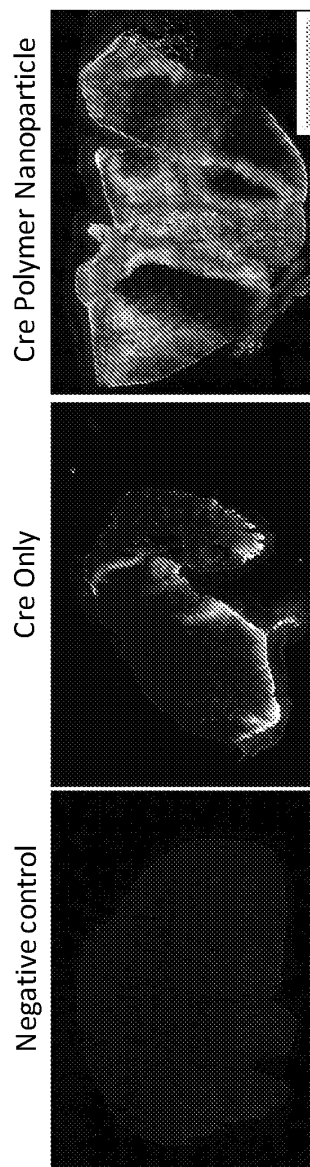


FIG. 6

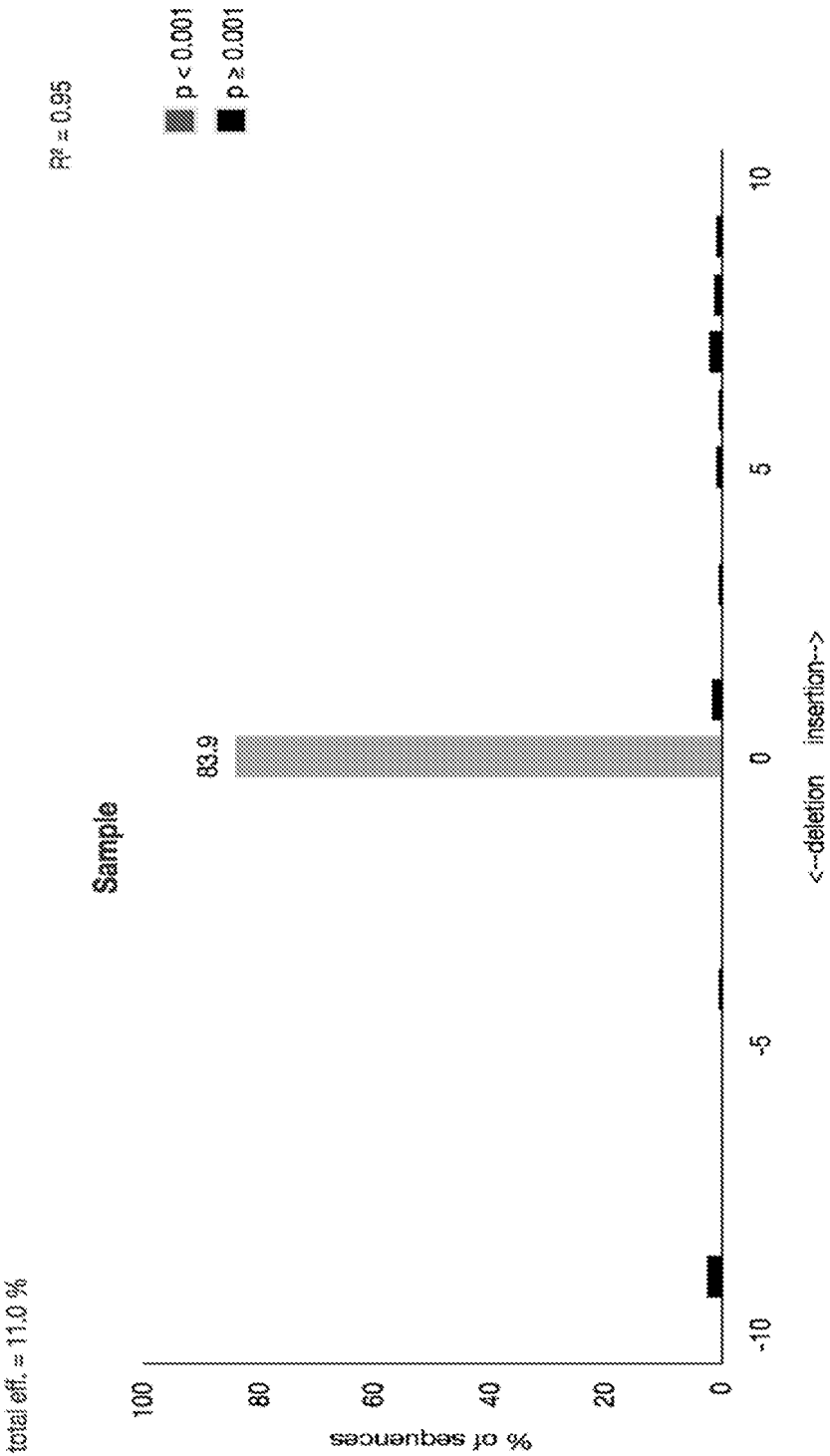


FIG. 7

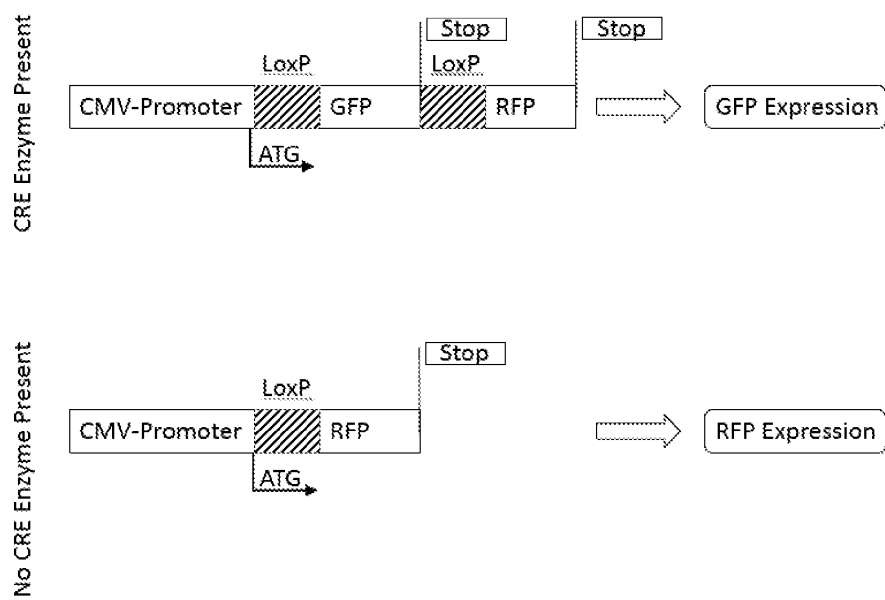


FIG. 8

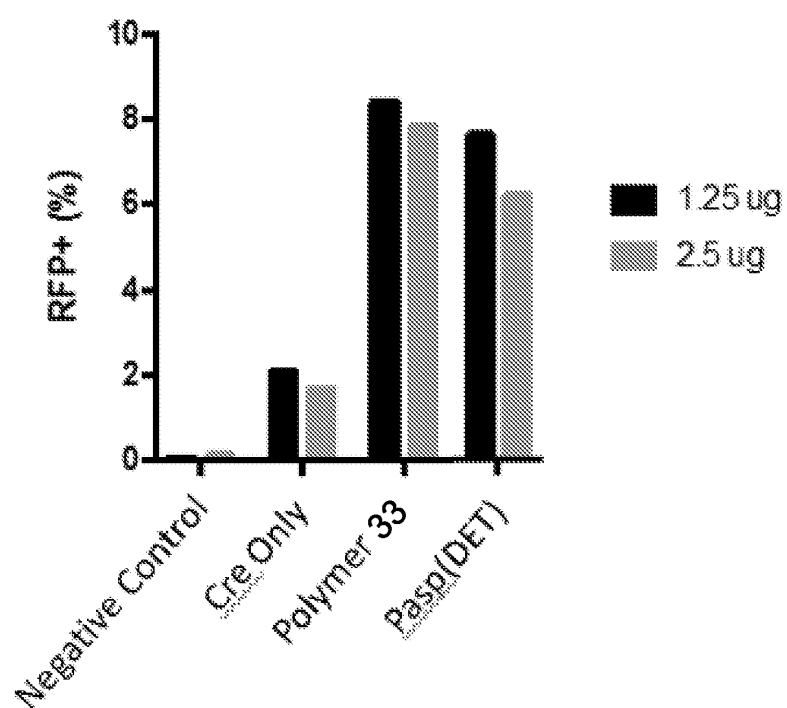


FIG. 9

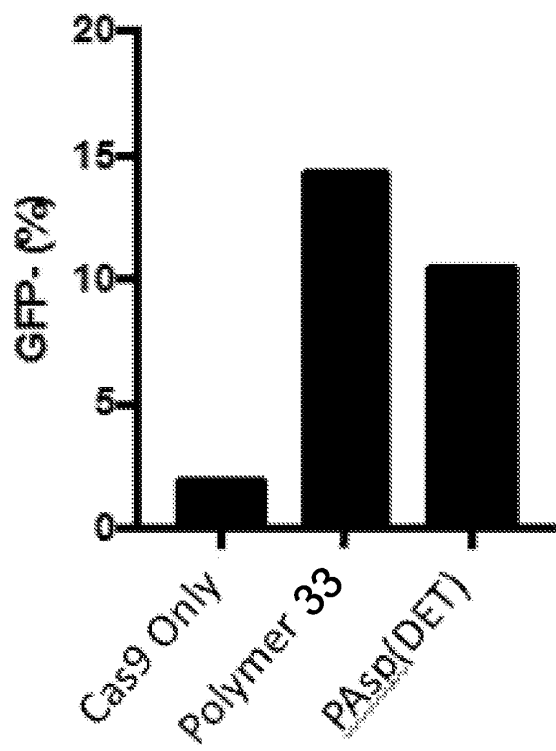


FIG. 10

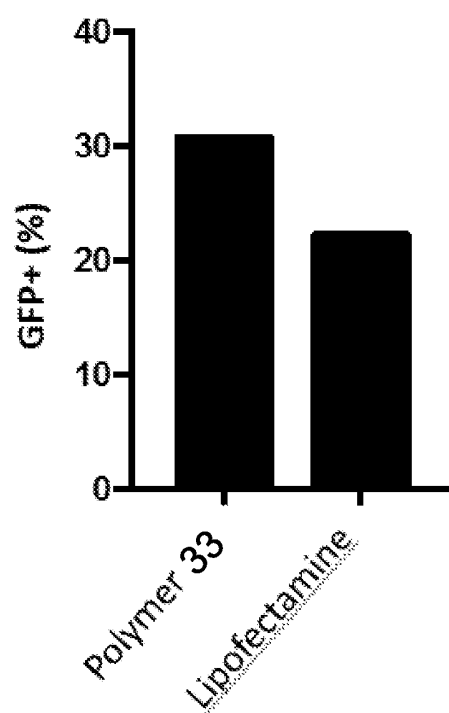


FIG. 11

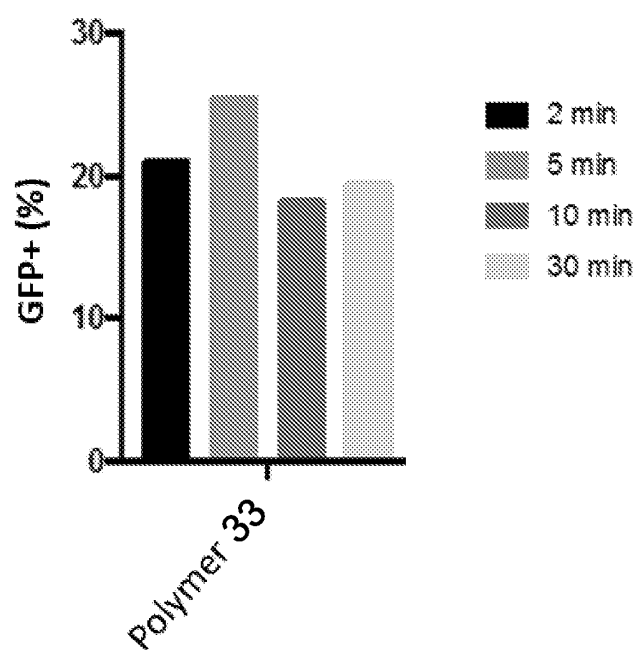


FIG. 12

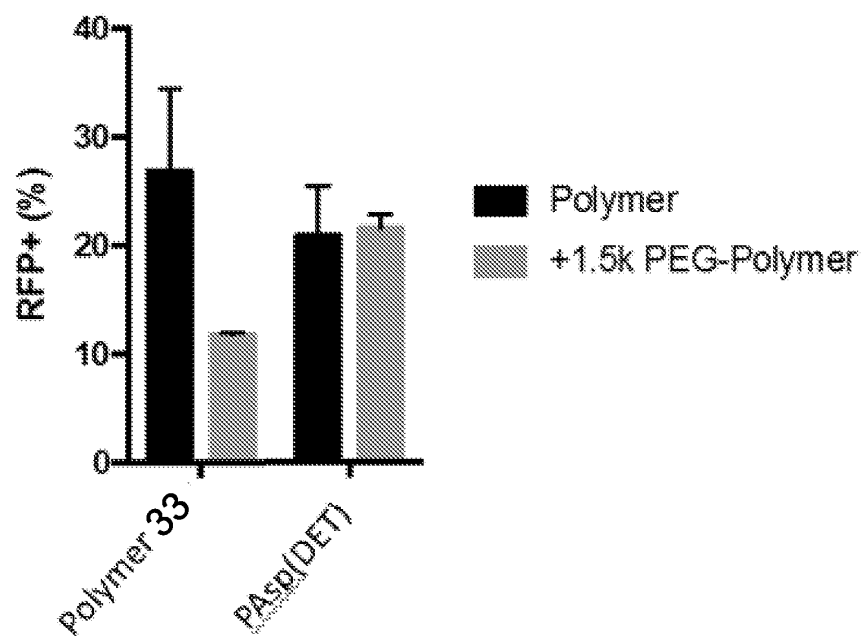


FIG. 13

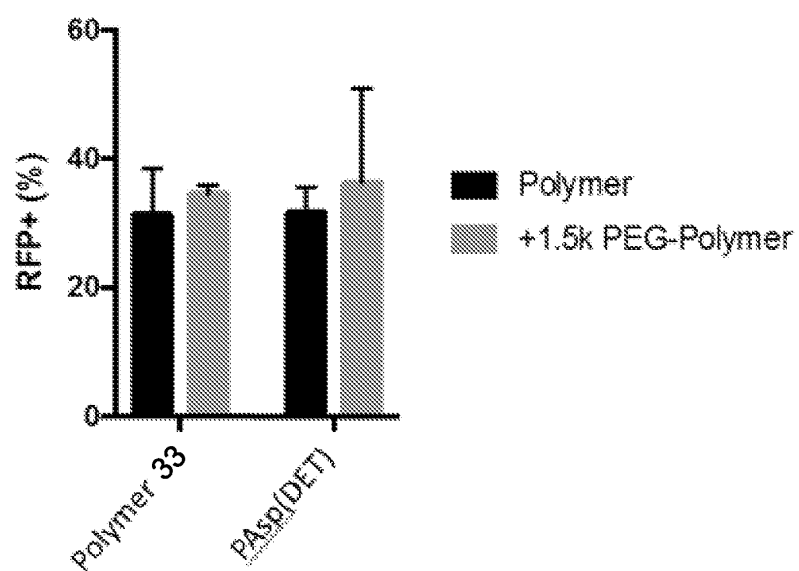


FIG. 14

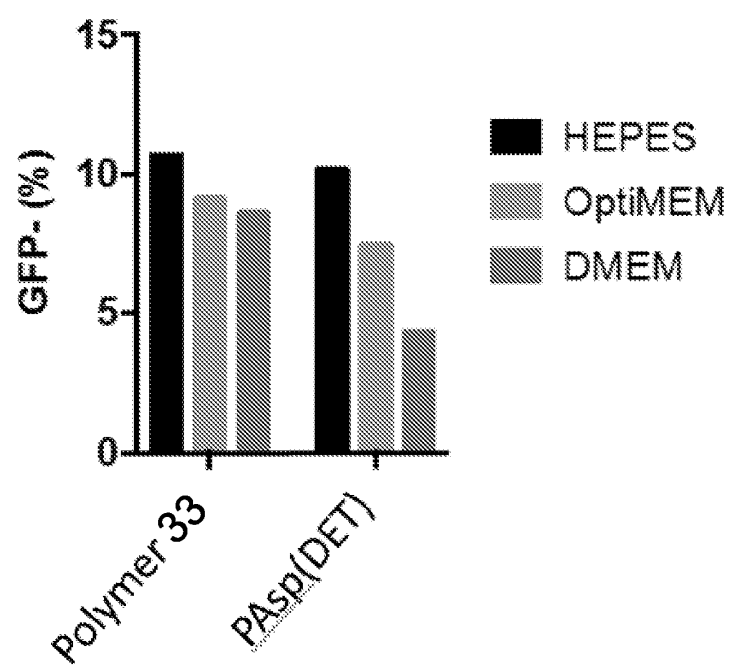


FIG. 15

AsCpfl

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121 inkrhaeiyy glfkaelfng kvlkqlgtvt ttehenallr sfdkfttyfs gfyenrkvnf
181 saedistaip hrivqdnfpk fkenchiftr litavpslre hfenvkkaig ifvstsieev
241 fsfpfynqll tqtqidlynq llggisreag tekikglnev lnlaigknde tahiiaslph
301 rfipflfkqil sdrntlsfil eefksdeevi qsfckyktll rnenvletae alfnelnsid
361 lthifishkk letissalcd hwdtlrnaly erriseltgk itksakekvq rslkhedinl
421 qeíisaagke lseafkqkts eilshahaal dqplpttlkk geekeilksq ldsllglyhl
481 ldwfavdesn evdpefsarl tgiklemeps lsfynkarny atkkpysvek fklnfqmpnl
541 asgwdvnkek nngailfvkn glyylgimpk qkgrykalsf eptektsege dkmmydyfnd
601 aakmipkcst qlkavtahfq thttpillsn nfiepleitk eiydlnnpek epkkfqtaya
661 kktgdqkgyr ealckwidft rdflskytkt tsidlsslrp ssqykdlgey yaelpillyh
721 isfgríaeke imdavetgkl ylfqiynkdf akghhgkpnl htlywtglfs penlaksik
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841 earallpnvi tkevsheíik drftsdkff fhvpitlnyq aanspskfng rvnaylkehp
901 etpiigidrg ernliytvi dstgkileqr slntiqgfdy qkkldnreke rvaarqawsv
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1021 dklnclvlkd ypaekvggvl npyqltdqft sfakmgtqsg flfyvpapyt skidpltgfv
1081 dpfvwktikn hesrkhfleg fdflhydvt gdflhfkmn rnlsfqrqlp gfm pawdivf
1141 eknetqfdak gtpfiagkri vpvienhrft gryrdlypan elialleekg ivfrdgsnil
1201 pkllenddsh aidtmvalir svlqmrnsna atgedyinsp vrdlngvcfd srfqnpewpm
1261 dadangayhi alkgqlllnh lkeskdllkq ngisnqdwla yiqeln
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FIG. 16

LbCpfI

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KKSNPCATGGALKGYQITNKFESFKSMSTQNGFIFYIPAWLTSKIDPSTGFVNLLKTKYT
SIADSKKFISFDRIMYVPEEDLFEFALDYKNFSRTDADYIKKWKLYSYGNRIRIFAAAK
KNNVFAWEEVCLTSAYKELFNKYGINYQQGDIRALLCEQSDKAFYSSFMALMSMLQMRN
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FIG. 17

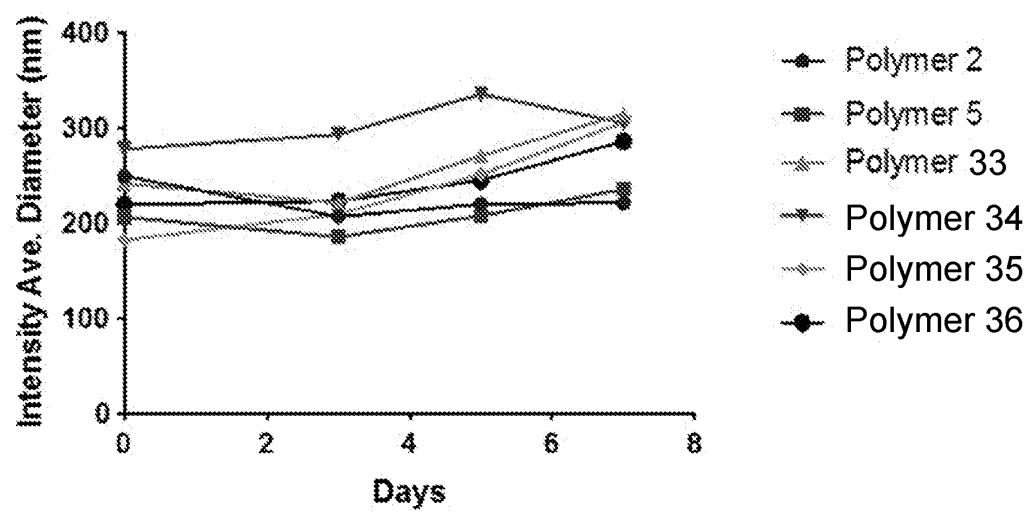


FIG. 18