Table S5. SOSIP immunogen sequences

Immunogen Name	Sequence
RC1-4fill-Spytag	MDAMKRGLCCVLLLCGAVFVSPAGAGSNLWVTVYYGVPVWKDAETTLFCASDAKAYETEKHNVWATHACVPTDPNPQEIHLENVTEEFNM WKNNMVEQMHEDIISLWDQSLKPCVKLTPLCVTLQCTNYAPNLLSNMRGELKQCSFNMTTELRDKKQKVYSLFYRLDVVQINENQGNRSNN SNKEYRLINCNTSAITQACPKVSFEPIPIHYCAPAGFAILKCKNKTFNGTGPCPNVSTVQCTHGIKPVVSTQLLLNGSLAEEEVIIRSENITNNAKNI LVQLNTSVQINCTRPNNNTVKSIRIGPGQAFYYFGDIIGDIRMAHCNVSKATWNETLGNVSKQLRKHFGNNTIIRFAQSSGGDLEVTTHSFNC GGEFFYCNTSGLFNSTWISNTSVQGSNSTGSNDSIVLPCRIKQIINMWQRIGQAMYAPPIQGVIRCVSNITGLILTRDGGSTNSTTETFRPGG GDMRDNWRSELYKYKVVKIEPLGVAPTRCKRRVVGRRRRRRAVGIGAVSLGFLGAAGSTMGAASMTLTVQARNLLSGIVQQQSNLLRAPE PQQHLLKDTHWGIKQLQARVLAVEHYLRDQQLLGIWGCSGKLICCTNVPWNSSWSNRNLSEIWDNMTWLQWDKEISNYTQIIYGLLEESQ NQQEKNEQDLLALDGGGGSGGGSGGGSGSGAHIVMVDAYKPTK
11MUTB-4fill-Spytag	MDAMKRGLCCVLLLCGAVFVSPAGAGSNLWVTVYYGVPVWKDAETTLFCASDAKAYETEKHNVWATHACVPTDPNPQEIHLENVTEEFNM WKNNMVEQMHEDIISLWDQSLKPCVKLTPLCVTLQCTNYAPNLLSNMRGELKNCSFNMTTELRDKKQKVYSLFYRLDVVQINENQGNRSNN SNKEYRLINCNTSAITQACPKVSFEPIPIHYCAPAGFAILKCKNKTFNGTGPCPNVSTVQCTHGIKPVVSTQLLLNGSLAEEEVIIRSENITNNAKNI LVQLNTSVQINCTRPNNNTVKSIRIGPGQAFYYFGDIIGDIRMAHCNVSKATWNETLGNVSKQLRKHFGNNTIIRFAQSSGGDLEVTTHSFNC GGEFFYCNTSGLFNSTWISNTSVQGSNSTGSNDSIVLPCRIKQIINMWQRIGQAMYAPPIQGVIRCVSNITGLILTRDGGSTNSTTETFRPGG GDMRDNWRSELYKYKVVKIEPLGVAPTRCKRRVVGRRRRRRAVGIGAVSLGFLGAAGSTMGAASMTLTVQARNLLSGIVQQQSNLLRAPE PQQHLLKDTHWGIKQLQARVLAVEHYLRDQQLLGIWGCSGKLICCTNVPWNSSWSNRNLSEIWDNMTWLQWDKEISNYTQIIYGLLEESQ NQQEKNEQDLLALDGGGGSGGGSGGGSGSGAHIVMVDAYKPTK
B41wt-Spytag	MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARAAKKWVTVYYGVPVWKEATTTLFCASDAKAYDTEVHNVWATHACVPTDPNPQEIVL GNVTENFNMWKNNMVEQMHEDIISLWDQSLKPCVKLTPLCVTLNCNNVNTNNTNNSTNATISDWEKMETGEMKNCSFNVTTSIRDKIKKE YALFYKLDVVPLENKNNINNTNITNYRLINCNTSVITQACPKVSFEPIPIHYCAPAGFAILKCNSKTFNGSGPCTNVSTVQCTHGIRPVVSTQLLLN GSLAEEEIVIRSENITDNAKTIIVQLNESVEINCTRPNNNTRKSIHIGPGRAFYATGDIIGNIRQAHCNISKARWNETLGQIVAKLEEQFPNKTIIF NHSSGGDPEIVTHSFNCGGEFFYCNTTPLFNSTWNNTRTDDYPTGGEQNITLQCRIKQIINMWQGVGKAMYAPPIRGQIRCSSNITGLLLTR DGGRDQNGTETFRPGGGNMRDNWRSELYKYKVVKIEPLGIAPTACKRRVVQRRRRRRAVGLGAFILGFLGAAGSTMGAASMALTVQARL LLSGIVQQQNNLLRAPEAQQHMLQLTVWGIKQLQARVLAVERYLRDQQLLGIWGCSGKIICCTNVPWNDSWSNKTINEIWDNMTWMQW EKEIDNYTQHIYTLLEVSQIQQEKNEQELLELDGGGGSGGGSGGGSGSGAHIVMVDAYKPTK
B41-5MUT-Spytag	MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARAAKKWVTVYYGVPVWKEATTTLFCASDAKAYDTEVHNVWATHACVPTDPNPQEIVL GNVTENFNMWKNNMVEQMHEDIISLWDQSLKPCVKLTPLCVTLNCNNYNPNLTNDMRNATISDWEKMETGEMKNCSFNVTTSIRDKIKKE YALFYKLDVVPLENKNNINNTNITNYRLINCNTSVITQACPKVSFEPIPIHYCAPAGFAILKCNSKTFNGSGPCTNVSTVQCTHGIRPVVSTQLLLN GSLAEEEIVIRSENITDNAKTIIVQLNESVEINCTRPNNNTRKSIHIGPGRWFYATGDIIGNIRQAHCNISKARWNETLGQIVAKLEEQFPNKTIIF NHSSGGDPEIVTHSFNCGGEFFYCNTTPLFNSTWNNTRTDDYPTGGEQNITLQCRIKQIINMWQGVGKAMYAPPIRGQIRCSSNITGLLLTR DGGRDQNGTETFRPGGGNMRDNWRSELYKYKVVKIEPLGIAPTACKRRVVQRRRRRRAVGLGAFILGFLGAAGSTMGAASMALTVQARL LLSGIVQQQNNLLRAPEAQQHMLQLTVWGIKQLQARVLAVERYLRDQQLLGIWGCSGKIICCTNVPWNDSWSNKTINEIWDNMTWMQW EKEIDNYTQHIYTLLEVSQIQQEKNEQELLELDGGGGSGGGSGGGSGSGAHIVMVDAYKPTK
AMC011-Spytag	MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARAEQLWVTVYYGVPVWKEATTTLFCASDARAYDTEVRNVWATHCCVPTDPNPQEVV LENVTENFNMWKNNMVEQMHEDIISLWDQSLKPCVKLTPLCVTLNCTDLRNATNTNATNTTSSSRGTMEGGEIKNCSFNITTSMRDKVQKE YALFYKLDVVPIKNDNTSYRLISCNTSVITQACPKVSFEPIPIHYCAPAGFAILKCNNKTFNGTGPCTNVSTVQCTHGIRPVVSTQLLLNGSLAEEE VVIRSANFTDNAKIIIVQLNKSVEINCTRPNNNTRKSIHIGPGRWFYTTGEIIGDIRQAHCNISGTKWNDTLKQIVVKLKEQFGNKTIVFNHSSG GDPEIVMHSFNCGGEFFYCNSTQLFNSTWNDTTGSNYTGTIVLPCRIKQIVNMWQEVGKAMYAPPIKGQIRCSSNITGLILIRDGGKNRSEN TEIFRPGGGDMRDNWRSELYKYKVVKIEPLGIAPTKCKRRVVQRRRRRRAVGIGAVFLGFLGAAGSTMGAASMTLTVQARQLLSGIVQQQ NNLLRAPECQQHLLKLTVWGIKQLQARVLAVERYLKDQQLLGIWGCSGKLICCTAVPWNTSWSNKSYNQIWNNMTWMEWEREIDNYTSLI YTLIEDSQNQQEKNEQELLELDGGGGSGGGSGGGSGSGAHIVMVDAYKPTK
Du422-Spytag	MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARNLDLWVTVYYGVPVWKEAKTTLFCASDAKAYDKEVRNVWATHACVPTDPNPQEIVL ENVTENFNMWKNDMVDQMHEDIISLWDQSLKPCVKLTPLCVTLNCKNVNISANANATATLNSSMNGEIKNCSFNTTTELRDKKQKVYALFY KPDVVPLNGGEHNETGEYILINCNSSTITQACPKVSFDPIPIHYCAPAGYAILKCNNKTFNGTGPCNNVSTVQCTHGIKPVVSTQLLLNGSLAEEE IIVRSENLTNNIKTIIVHLNKSVEINCTRPNNNTRKSVRIGPGQWFYATGEIIGDIREAHCNISRETWNSTLIQVKEKLREHYNKTIKFEPSSGGDL EVTTHSFNCRGEFFYCNTTKLFNETKLFNESEYVDNKTIILPCRIKQIINMWQEVGRAMYAPPIEGNITCKSNITGLLLTWDGGENSTEGVFRP GGGNMKDNWRSELYKYKVVEIKPLGVAPTKCKRKVVGRRRRRRAVGLGAVLLGFLGAAGSTMGAASMTLTVQARQLLSGIVQQQSNLLR APEAQQHLLQLTVWGIKQLQTRVLAIERYLKDQQLLGLWGCSGKLICCTAVPWNSSWSNKSLGDIWDNMTWMQWDREISNYTNTIFRLLE DSQNQQEKNEKDLLALDGGGGSGGGSGGGSGSGAHIVMVDAYKPTK
ConM-Spytag	MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARAENLWVTVYYGVPVWKDAETTLFCASDAKAYDTEKRNVWATHCCVPTDPNPQEIVL ENVTENFNMWKNNMVEQMHTDIISLWDQSLKPCVKLTPLCVTLNCTDVNATNNTTNNEEIKNCSFNITTELRDKKKKVYALFYKLDVVPIDDN NSYRLINCNTSAITQACPKVSFEPIPIHYCAPAGFAILKCNDKKFNGTGPCKNVSTVQCTHGIKPVVSTQLLLNGSLAEEEIIIRSENITNNAKTIIVQ LNESVEINCTRPNNNTRKSIRIGPGQWFYATGDIIGDIRQAHCNISRTKWNKTLQQVAKKLREHFNKTIIFNPSSGGDLEITTHSFNCGGEFFYC NTSELFNSTWNGTNNTITLPCRIKQIINMWQRVGQAMYAPPIEGKIRCTSNITGLLLTRDGGNNNTETFRPGGGDMRDNWRSELYKYKVVK IEPLGVAPTRCKRRVVERRRRRRAVGIGAVFLGFLGAAGSTMGAASMTLTVQARNLLSGIVQQQSNLLRAPECQQHLLQLTVWGIKQLQAR VLAVERYLKDQQLLGIWGCSGKLICCTNVPWNSSWSNKSQDEIWDNMTWMEWDKEINNYTDIIYSLIEESQNQQEKNEQELLALDGGGGS GGGSGGGSGSGAHIVMVDAYKPTK
ConC-Spytag	MRVRGILRNWQQWWIWGILGFWMLMICNVVGNLWVTVYYGVPVWKEAKTTLFCASDAKAYEKEVHNVWATHACVPTDPNPQEMVLE NVTENFNMWKNDMVDQMHEDIISLWDQSLKPCVKLTPLCVTLNCTNVNVTNTNNNNMKEEMKNCSFNTTTEIRDKKQKEYALFYRLDIVPL NENSSEYRLINCNTSTITQICPKVSFDPIPIHYCAPAGYAILKCNNKTFNGTGPCNNVSTVQCTHGIKPVVSTQLLLNGSLAEEEIIIRSENLTDNAK TIIVHLNESVEINCTRPNNNTRKSIRIGPGQTFYATGDIIGDIRQAHCNISEAKWNKTLQRVKKKLKEHFPNKTIKFAPSSGGDLEITTHSFNCRGE FFYCNTSKLFNSTYNNTTSNSTITLPCRIKQIINMWQEVGRAMYAPPIAGNITCKSNITGLLLTRDGGNNNNNTETFRPGGGDMRDNWRSEL YKYKVVEIKPLGIAPTKCKRRVVERRRRRRAVGIGAVFLGFLGAAGSTMGAASNTLTVQARQLLSGIVQQQSNLLRAPEAQQHMLQLTVWG FKQLQARVLAIERYLEVQQLLGIWGCSGKLICCTAVPWNSSWSNKSQEDIWDNMTWMQWDREISNYTDTIYRLLEESQFQQEINEKDLLAL DGGGGSGGGSGGGSGSGAHIVMVDAYKPTK