

>RBD-I53-50A trimer (16-GS linker, using wild type RBD from Wuhan-Hu-1)

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADY
SVLYNSASFSTFKCYGVSPTKLNLDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVL SFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk1-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADW
SVLYNSASFSTFKCYGVSPTKLNLDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVL SFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk2-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPLGEVFNATRFASVYAWNRKRISNCVADW
SVLYNSASFSTFKCYGVSPTKLNLDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVL SFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk3-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADW
SVLYNSASFSTFKCYGVSPTKLNLDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVMSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk4-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADY
SVLYNSASFSTFKCYGVSPTKLNLDLCWTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk5-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADW
SVLYNSASFSTFKCYGVSPTKLNLDLCWTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk6-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPMGEVFNATRFASVYAWNRKRISNCVLD F
SVLYNSASFSTVKCYGVSPTKLNLDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk7-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVAD F
SVLYNSASFSTFKCYGVSPTKLNLDLCWTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk8-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVAD F
SVLYNSASFSTFKCYGVSPTKLNLDLCFTNIYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA

WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLPGEVVGPPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk9-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADF
SVLYNSASFSTFKCYGVSPTKLNLDLCTNVIYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLPGEVVGPPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk10-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADW
SVLYNSASFSTFKCYGVSPTKLNLDLCTNVIYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVISLELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLPGEVVGPPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk11-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPGGEVFNATRFASVYAWNRKRISNCVLDM
SVLYNSASFSTFKCYGVSPTKLNLDLCTNVIYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLPGEVVGPPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk12-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRFSNCVADW
SVLYNSASFSTFKCYGVSPTKLNLDLCTNVIYADSFVIRGDEVQRQIAPGQTGKIADYNYKL PDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAEAAARKMEELFKKHKIVAVLRA

NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk13-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPLGEVFNATRFASVYAWNRKRFSNCVADW
SVLYNSASFSTFKCYGVSPTKLNLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk14-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRFSNCVADW
SVLYNSASFSTFKCYGVSPTKLNLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVMSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk15-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRFSNCVADF
SVLYNSASFSTFKCYGVSPTKLNLCFTNIYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMPTTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVKVFVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk16-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRFSNCVADW
SVLYNSASFSTFKCYGVSPTKLNLCWTVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVVLSFELLHAPATVCGPKKSTGGSGGSGSGGSGGSGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV

SPHLDEEISQFAKEKGVFYMPGVMTPTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>Rpk17-I53-50A trimer

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRFSNCVADF
SVLYNSASFSTFKCYGVSPTKLNLDLCWTNIYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGGSGGSGGSGGSGGSEKAAKAAEEAARKMEELFKKHKIVAVLRA
NSVEEAIEKAVAVFAGGVHLIEITFTVPDADTVIKALSVLKEKGAIIGAGTVTSVEQARKAVESGAEFIV
SPHLDEEISQFAKEKGVFYMPGVMTPTELVKAMKLGHTILKLFPGEVVGPQFVKAMKGPFPNVK FVPTGG
VNLDNVAEWFKAGVLAVGVGSALVKGTPDEVREKAKAFVEKIRGATEGGSHHHHHHHH

>RBD monomer (with Avi and hexa-histidine tags)

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADY
SVLYNSASFSTFKCYGVSPTKLNLDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGLNDIFEAQKIEWHEHHHHHHHHH

>Rpk4 monomer (with Avi and hexa-histidine tags)

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADY
SVLYNSASFSTFKCYGVSPTKLNLDLCWTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGLNDIFEAQKIEWHEHHHHHHHHH

>Rpk9 monomer (with Avi and hexa-histidine tags)

MGILPSPGMPALLSLVSLLSVLLMGCVAETGTRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADF
SVLYNSASFSTFKCYGVSPTKLNLDLCWTNIYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIA
WNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGY
QPYRVVLSFELLHAPATVCGPKKSTGLNDIFEAQKIEWHEHHHHHHHHH

>I53-50B.4PT1 pentamer

MNQHSHKDHETVRIAVVRARWHAIEIVDACVSAFEAMRDIGGDRFAVDVFDVPGAYEIP LHARTLAETGR
YGAVLGTAFVVNGGIYRHEFVASAVINGMMNVQLNTGVPVLSAVLTPHNYDKSKAHTLLFLALFAVKGME
AARACVEILAAREKIAAGSLEHHHHHHH

>20BX pentamer

MNQSHKDYETVRIAVVRARWHADIVDQCVSFAFEAMADIGGDRFAVDVFDVPGAYEIPLHARTLAETGR
YGAVLGTAFVVNGGIYRHEFVASAVIDGMMNVQLSTGVPVLSAVLTPHNYHDSA EHRFFFEHFTVKGKE
AARACVEILAAREKIAAGSLEHHHHHH

>Hexapro-foldon, used for immunizations (Wuhan-Hu-1)

MFVFLVLLPLVSSQCVNL TTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFSNVTWFHAIHV
SGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLD SKTQSLLIVNNATNVVIKVCEFQFCNDPF
LGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFLMDLEGKQGNFKNLREFVFKNIDGYFKIYSKHTPI
NLVRDL PQGFSALEPLVDLPIGINITRFQTL LALHRSYLT PGDSSSGWTAGAAAYVGYLQPRTFLLKYN
ENGTITDAVDCALDPLSETKCTLSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEVFNATRFASV
YAWNKRISNCVADYSVLYNSASFSTFKCYGVSPTKLN DLCTNVYADSFVIRGDEV RQIAPGQTGKIAD
YNYKLPDDFTGCVIAWNSNNLDSKVGNYNYLYR LFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYF
PLQSYGFQPTNGVGYQP YRVVLSFELLHAPATVCGPKKSTNLVKNKCVNFNFNGLTGTGVLTESNKKFL
PFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVS VITPGTNTSNQVAVLYQDVNCTEVPVAIHADQLT
PTWRVYSTGSNVFQTRAGCLIGA EHVNNSYECDIPIGAGICASYQTQTNSPGSASSVASQSIIAYTMSLG
AENSVAYSNN SIAIPTNFTISVTTEILPVSM TKTSDCTMYICGDSTEC SNLLLQYGSFCTQLNRAL TGI
AVEQDKNTQEVFAQVKQIYKTPPIKDFGGFNFSQILPDP SKPSKRSP IEDLLFNKVT LADAGFIKQYGDC
LGDIAARDL ICAQKFNGLTVLPPLL TDEMIAQYTSALLAGTITSGWTFGAGPALQIPFPMQMAYRFNGIG
VTQNVLYENQKLIANQFN SAIGKIQDLSSTPSALGKLQDVVNQNAQALNTLVKQLSSNFGA ISSVLNDI
LSRLDPPEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGYHLM
SFPQSAPHGVVFLHVTYVPAQEKNF TAPAICH DGKAHFPREGV FVSNGTHWFVTQRNFYEPQIITDNT
FVSGNCDVVIGIVNNTVYDPLQPELDSFKEELDKYFKNHTSPDV DLGDISGINASVVNIQKEIDRLNEVA
KNL NESLIDLQELGKYEQSGSYIPEAPRDGQAYVRKDG EWVLLSTFLGRSLEVL FQGP GHHHHHHHHS AW
SHPQFEKGGGSGGGGSGGSAWSHPQFEK

>Hexapro-foldon, used for expression and stability comparisons with
Rpk9-Hexapro-foldon (Wuhan-Hu-1)

MARAWIFFLLCLAGRALAQC VNLTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFSNVTWF
HAIHVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLD SKTQSLLIVNNATNVVIKVCEFQF
CNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFLMDLEGKQGNFKNLREFVFKNIDGYFKIYS
KHTPINLVRDL PQGFSALEPLVDLPIGINITRFQTL LALHRSYLT PGDSSSGWTAGAAAYVGYLQPRTF
LLKYNENGTITDAVDCALDPLSETKCTLSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEVFNAT
RFASVYAWNKRISNCVADYSVLYNSASFSTFKCYGVSPTKLN DLCTNVYADSFVIRGDEV RQIAPGQT
GKIADYNYKLPDDFTGCVIAWNSNNLDSKVGNYNYLYR LFRKSNLKPFERDISTEIQAGSTPCNGVEG
FNCYFPLQSYGFQPTNGVGYQP YRVVLSFELLHAPATVCGPKKSTNLVKNKCVNFNFNGLTGTGVLTES
NKKFLPFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVS VITPGTNTSNQVAVLYQDVNCTEVPVAIH
ADQLTPTWRVYSTGSNVFQTRAGCLIGA EHVNNSYECDIPIGAGICASYQTQTNSPGSASSVASQSIIAY
TMSLGAENSVAYSNN SIAIPTNFTISVTTEILPVSM TKTSDCTMYICGDSTEC SNLLLQYGSFCTQLNR

ALTGIAVEQDKNTQEVEFAQVKQIYKTPPIKDFGGFNFSQILPDPSKPSKRSPIEDLLFNKVTLADAGFIK
QYGDCLGDIAARDLICAQKFNGLTVLPPLLTDEMQYTSALLAGTITSGWTFGAGPALQIPFPMQMAYR
FNGIGVTQNVLYENQKLIANQFNFAIGKIQDSLSTPSALGKLQDVVNQNAQALNTLVKQLSSNFGAISS
VLNDILSRDPPEAEVQIDRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGK
GYHLMSFPQSAPHGVVFLHVTYVPAQEKNFTTAPAICHGDKAHFPREGVFVSNGTHWFVTQRNFYEPQII
TTDNTEFVSGNCDVVIGIVNNTVYDPLQPELDSFKEELDKYFKNHTSPDVLGDISGINASVVNIQKEIDR
LNEVAKNLNESLIDLQELGKYEQSGYIPEAPRDGQAYVRKDGWVLLSTFLGRSLEVLFGQPGHHHHHH
HH

>Rpk9-Hexapro-foldon (Wuhan-Hu-1)

MARAWIFFLLCLAGRALAQCENLTTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFSNVTFW
HAIHVSNGTNGTKRFDNPVLPFNDGVYFASTEKSNIRGWIFGTTLDSTQSLIIVNNATNVVIKVFCEQF
CNDPFLGVYHKNKSWMESEFRVYSSANNCTFEYVSQPFLMDLEGKQGNFKNLREFVFKNIDGYFKIYS
KHTPINLVRDLQGFSALEPLVDLPIGINITRFQTLALHRSYLTGDSGWTAGAAAYVGYLQPRTF
LLKYNENGTITDAVDCALDPLSETKCTLSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEVFNAT
RFASVYAWNRKRISNCVADFSVLYNSASFSTFKCYGVSPTKLDLNCWTNIYADSFVIRGDEVQRQIAPGQT
GKIADYNYKLPDDFTGCVIAWNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEYQAGSTPCNGVEG
FNCYFPLQSYGFQPTNGVGYQPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVNFNGLTGTGVLTES
NKKFLPFQFGRDIADTTDAVRDPQTEILDITPCSFGGVSVITPGTNTSNQVAVLYQDVNCTEVPVAIH
ADQLTPTWRVYSTGSNVFQTRAGCLIGAHEVNNSECDIPIGAGICASYQTQTNSPGSASSVASQSIIAY
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HH

>hACE2-FC

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