Supplemental Table 1

Insert	DNA sequence	Amino Acid sequence
SmBiT-ACE2 (IL12 secretion signal-ACE2-HA-His)	ATGTGCCCCCAAAAGTTGACCAT	MCPQKLTISW
	CTCATGGTTCGCAATTGTACTACT	FAIVLLVSPLM
	AGTGAGTCCCTTGATGGCAGGCG	AGGSGGSSGV
	GAAGTGGAGGTTCCTCTGGAGTG	TGYRLFEEILQS
	ACCGGATACAGGCTGTTCGAGGA	TIEEQAKTFLD
	GATCCTGCAGAGCACAATCGAG	KFNHEAEDLF
	GAGCAGGCCAAGACCTTCCTGG	YQSSLASWNY
	ACAAGTTTAACCACGAGGCCGA	NTNITEENVQ
	GGATCTGTTTTATCAGAGCTCCCT	NMNNAGDK
	GGCCTCCTGGAACTACAATACCA	WSAFLKEQSTL
	ACATCACAGAGGAGAATGTGCA	AQMYPLQEIQ
	GAACATGAACAATGCCGGCGAC	NLTVKLQLQA
	AAGTGGTCTGCCTTCCTGAAGGA	LQQNGSSVLSE
	GCAGAGCACACTGGCCCAGATG	DKSKRLNTILN
	TACCCTCTGCAGGAGATCCAGAA	TMSTIYSTGKV
	CCTGACCGTGAAGCTGCAGCTGC	CNPDNPQECL
	AGGCCCTGCAGCAGAATGGCTCT	LLEPGLNEIMA
	AGCGTGCTGTCCGAGGATAAGTC	NSLDYNERLW
	TAAGCGGCTGAATACAATCCTGA	AWESWRSEVG
	ACACCATGAGCACAATCTATTCC	KQLRPLYEEYV
	ACCGGCAAGGTGTGCAATCCCG	VLKNEMARA
	ACAACCCTCAGGAGTGTCTGCTG	NHYEDYGDY
	CTGGAGCCTGGCCTGAATGAGAT	WRGDYEVNG
	CATGGCCAACAGCCTGGATTACA	VDGYDYSRGQ

	ATGAGAGGCTGTGGGCATGGGA	LIEDVEHTFEEI
	GTCCTGGCGCTCTGAAGTGGGCA	KPLYEHLHAY
	AGCAGCTGCGGCCACTGTACGA	VRAKLMNAYP
	GGAGTATGTGGTGCTGAAGAACG	SYISPIGCLPAH
	AGATGGCCAGAGCCAATCACTA	LLGDMWGRF
	CGAGGACTATGGCGATTACTGGA	WTNLYSLTVPF
	GGGGCGACTATGAGGTGAACGG	GQKPNIDVTD
	CGTGGACGGCTACGATTATAGCC	AMVDQAWDA
	GCGGCCAGCTGATCGAGGATGTG	QRIFKEAEKFF
	GAGCACACATTCGAGGAGATCA	VSVGLPNMTQ
	AGCCCCTGTATGAGCACCTGCAC	GFWENSMLTD
	GCCTACGTGCGGGCCAAGCTGAT	PGNVQKAVC
	GAATGCCTATCCAAGCTACATCT	HPTAWDLGK
	CCCCAATCGGATGCCTGCCTGCA	GDFRILMCTK
	CACCTGCTGGGCGACATGTGGGG	VTMDDFLTAH
	CAGATTCTGGACAAACCTGTACT	HEMGHIQYD
	CCCTGACCGTGCCATTTGGCCAG	MAYAAQPFLL
	AAGCCCAATATCGACGTGACCG	RNGANEGFHE
	ATGCCATGGTGGACCAGGCCTGG	AVGEIMSLSAA
	GATGCCCAGAGGATCTTCAAGGA	TPKHLKSIGLL
	GGCCGAGAAGTTCTTCGTGAGCG	SPDFQEDNETE
	TGGGCCTGCCAAACATGACACA	INFLLKQALTI
	GGGCTTTTGGGAGAATAGCATGC	VGTLPFTYMLE
	TGACCGACCCAGGCAACGTGCA	KWRWMVFKG
	GAAGGCCGTGTGCCACCCAACA	EIPKDQWMKK
	GCATGGGACCTGGGCAAGGGCG	WWEMKREIVG
	ATTTCCGCATCCTGATGTGCACC	VVEPVPHDET
	AAGGTGACAATGGACGATTTTCT	YCDPASLFHVS
	GACCGCCCACCACGAGATGGGC	NDYSFIRYYTR

	CACATCCAGTATGATATGGCATA	TLYQFQFQEAL
	CGCAGCACAGCCCTTCCTGCTGA	CQAAKHEGPL
	GGAATGGCGCCAACGAGGGCTTT	HKCDISNSTEA
	CACGAGGCCGTGGGCGAGATCA	GQKLFNMLRL
	TGTCTCTGAGCGCCGCCACACCT	GKSEPWTLAL
	AAGCACCTGAAGAGCATCGGCC	ENVVGAKNM
	TGCTGTCCCCAGACTTCCAGGAG	NVRPLLNYFEP
	GATAACGAGACCGAGATCAATTT	LFTWLKDQNK
	TCTGCTGAAGCAGGCCCTGACCA	NSFVGWSTDW
	TCGTGGGCACACTGCCCTTCACC	SPYADQSIKVR
	TATATGCTGGAGAAGTGGCGCTG	ISLKSALGDKA
	GATGGTGTTTAAGGGCGAGATCC	YEWNDNEMY
	CTAAGGACCAGTGGATGAAGAA	LFRSSVAYAM
	GTGGTGGGAGATGAAGCGGGAG	RQYFLKVKNQ
	ATCGTGGGCGTGGTGGAGCCTGT	MILFGEEDVRV
	GCCACACGACGAGACCTACTGTG	ANLKPRISFNF
	ATCCTGCCAGCCTGTTCCACGTG	FVTAPKNVSDI
	TCTAACGACTATAGCTTTATCAG	IPRTEVEKAIR
	GTACTATACCCGCACACTGTACC	MSRSRINDAFR
	AGTTCCAGTTTCAGGAGGCCCTG	LNDNSLEFLGI
	TGCCAGGCAGCAAAGCACGAGG	QPTLGPPNQP
	GCCCACTGCACAAGTGTGATATC	PVSGSGYPYDV
	TCCAACTCTACAGAGGCCGGCCA	PDYAYPYDVP
	GAAGCTGTTCAATATGCTGAGAC	DYAYPYDVPD
	TGGGCAAGTCCGAGCCATGGAC	YASSGHIEGRH
	CCTGGCCCTGGAGAACGTGGTGG	MLEMGHHHH
	GAGCCAAGAATATGAACGTGAG	HHHHHH
	GCCTCTGCTGAATTATTTCGAGC	
	CACTGTTTACATGGCTGAAGGAC	

	CAGAATAAGAACTCCTTTGTGGG CTGGTCCACCGACTGGTCTCCAT ACGCCGATCAGTCTATCAAGGTG AGGATCTCTCTGAAGAGCGCCCT GGGCGACAAGGCCTATGAGTGG AATGATAACGAGATGTACCTGTT CAGATCCTCTGTGGCCTATGCCA TGAGGCAGTACTTCCTGAAGGTG AAGAACCAGATGATCCTGTTTGG CGAGGAGGACGTGCGGGTGGCC AATCTGAAGCCCAGAATCAGCTT TAACTTCTTTGTGACAGCCCCCA AGAACGTGAGCGATATCATCCCT CGCACCGAGGTGGAGAAGGCCA TCCGGATGAGCCGGTCCAGAATC AACGACGCCTTCAGACTGAATGA TAACAGCCTGGAGTTTCTGGGCA TCCAGCCTACCCTGGGACCACCT AATCAGCCACCCGTGTCTGGCAG CGGCTACCCATATGACGTGCCCG ATTACGCCTATCCTTACGACGTG CCAGATTATGCCTACCCCTATGA CGTGCCTGATTACGCAAGCTCCG GACACATCGAGGGCAGGCACAT GCTGGAGATGGGCCATCATCACC ATCATCACCACCACCACCACTGA	
RBD-LgBiT	ATGGAGACAGACACACTCCTGCTA TGGGTACTGCTGCTCTGGGTTCCAG	METDTLLL WVLLLWVP

(IgK leader-3XFLAG-RBD-LgBiT-His)	GTTCCACTGGTGACTCTGGCTCTAG	GSTGDSGSS
	CGGCTCTGGCAGCGGCGACTACAA	GSGSGDYK
	GGACCACGACGGTGACTACAAGGA	DHDGDYKD
	CCACGACATCGACTACAAGGACGA	HDIDYKDD
	CGACGACAAGGGAGGAGGAGGCT	DDKGGGGS
	CTAGCGGCGGCAACATCACAAATC	SGGNITNLC
	TGTGCCCATTCGGCGAGGTGTTTAA	PFGEVFNAT
	CGCCACCAGATTTGCCAGCGTGTAT	RFASVYAW
	GCCTGGAACCGGAAGAGAATCTCT	NRKRISNCV
	AATTGCGTGGCCGACTATAGCGTGC	ADYSVLYNS
	TGTACAATAGCGCCTCCTTCTCTAC	ASFSTFKCY
	CTTTAAGTGCTATGGCGTGTCCCCC	GVSPTKLND
	ACAAAGCTGAACGACCTGTGCTTC	LCFTNVYA
	ACCAACGTGTACGCCGACTCTTTTG	DSFVIRGDE
	TGATCAGGGGCGATGAGGTGCGCC	VRQIAPGQT
	AGATCGCACCTGGACAGACAGGCA	GKIADYNY
	AGATCGCCGACTACAACTATAAGC	KLPDDFTGC
	TGCCAGACGATTTCACCGGCTGCGT	VIAWNSNN
	GATCGCCTGGAATAGCAACAATCT	LDSKVGGN
	GGATTCCAAAGTGGGCGGCAACTA	YNYLYRLFR
	CAATTATCTGTACCGGCTGTTCAGA	KSNLKPFER
	AAGAGCAACCTGAAGCCCTTTGAG	DISTEIYQAG
	CGGGATATCAGCACAGAGATCTAC	STPCNGVEG
	CAGGCAGGCTCCACCCCTTGCAAC	FNCYFPLQS
	GGAGTGGAGGGCTTCAATTGTTATT	YGFQPTNG
	TTCCCCTGCAGAGCTACGGCTTCCA	VGYQPYRV
	GCCTACAAATGGCGTGGGCTATCA	VVLSFELLH
	GCCATACAGGGTGGTGGTGCTGTCC	APATVGSSG
	TTTGAGCTGCTGCACGCACCTGCAA	GGGSGGGG

	CCGTGGGGAGTTCCGGTGGTGGCG	SSGGVFTLE
	GGAGCGGAGGTGGAGGCTCGAGCG	DFVGDWEQ
	GTGGAGTGTTCACACTGGAGGACTT	TAAYNLDQ
	TGTGGGCGATTGGGAGCAGACCGC	VLEQGGVSS
	CGCCTACAACCTGGACCAGGTGCT	LLQNLAVSV
	GGAGCAGGGAGGCGTGTCCTCTCT	TPIQRIVRSG
	GCTGCAGAATCTGGCCGTGTCTGTG	ENALKIDIH
	ACACCAATCCAGAGGATCGTGCGC	VIIPYEGLSA
	AGCGGCGAGAACGCCCTGAAGATC	DQMAQIEE
	GACATCCACGTGATCATCCCCTACG	VFKVVYPVD
	AGGGCCTGTCCGCCGATCAGATGG	DHHFKVILP
	CCCAGATCGAGGAGGTGTTCAAGG	YGTLVIDGV
	TGGTGTATCCAGTGGACGATCACCA	TPNMLNYF
	CTTCAAAGTGATCCTGCCCTACGGC	GRPYEGIAV
	ACCCTGGTCATCGACGGAGTGACC	FDGKKITVT
	CCCAACATGCTGAATTATTTCGGCC	GTLWNGNK
	GGCCTTACGAGGGCATCGCCGTGTT	IIDERLITPD
	TGATGGCAAGAAGATCACCGTGAC	GSMLFRVTI
	AGGCACCCTGTGGAACGGCAATAA	NSSSGHIEG
	GATCATCGACGAGCGGCTGATCAC	RHMLEMGH
	ACCTGATGGCTCCATGCTGTTCAGA	HHHHHHH
	GTGACCATCAACTCCTCCTCTGGAC	HH
	ACATCGAGGGCCGCCACATGCTGG	
	AGATGGGCCATCATCACCATCATC	
	ACCACCACCACCACTGA	