

Supplementary Material 1

A. Sticky ends paired oligos

GATCTATCGATGTTAACACCGGTGTCGACA and ATAGCTACAATTGTGGCCACAGCTGTGCGC

B. Nanobody DNA constructs

C7 construct

CTGAGATCACCGGCGAAGGAGGGCCACCATGTACAGGATGCAACTCCTGTCTTGCACTGACTAAGTCTTGCACTTGTAC
GAATTCGGGAGGAGGAGGATCCCAGGTCCAGCTTCAGGAGTCCGGCGGAGGGAGCGTGCAAGCTGGGGAGAGCCTGAC
GCTGAGCTGCACTGCCAGCGGCTCCTCTTTGAGCCACAAGAGTGTTGGCTGGTGGCGGCAAACACCCGGTAACCAGCGGG
AGCTGGTGGCCCTGGTGGCAAGCGGCAATAACACAACTACGTAGATAGTGTAAAGGCCGGTTCACCGTTAGCCGGGA
CAATGCCAAGAATACTATGTATCTGCAGATGAACTCCCTCAAGCCGAAGACACCGCCGTGTACTACTGCAGAATCCTGTC
TGTGAACGGCATCTGGTATTGGGGACAGGGCACCCAGGTGACCGTCTCATCAGGAGGAGGAGGATCCTACCCATACGAT
GTTCCAGATTACGCTTAGTAG

C7-T57A construct

CTGAGATCACCGGCGAAGGAGGGCCACCATGTACAGGATGCAACTCCTGTCTTGCACTGACTAAGTCTTGCACTTGTAC
GAATTCGGGAGGAGGAGGATCCCAGGTCCAGCTTCAGGAGTCCGGCGGAGGGAGCGTGCAAGCTGGGGAGAGCCTGAC
GCTGAGCTGCACTGCCAGCGGCTCCTCTTTGAGCCACAAGAGTGTTGGCTGGTGGCGGCAAACACCCGGTAACCAGCGGG
AGCTGGTGGCCCTGGTGGCAAGCGGCAATAACGCAAACTACGTAGATAGTGTAAAGGCCGGTTCACCGTTAGCCGGGA
CAATGCCAAGAATACTATGTATCTGCAGATGAACTCCCTCAAGCCGAAGACACCGCCGTGTACTACTGCAGAATCCTGTC
TGTGAACGGCATCTGGTATTGGGGACAGGGCACCCAGGTGACCGTCTCATCAGGAGGAGGAGGATCCTACCCATACGAT
GTTCCAGATTACGCTTAGTAG

5DXW construct

CTGAGATCACCGGCGAAGGAGGGCCACCATGTACAGGATGCAACTCCTGTCTTGCACTGACTAAGTCTTGCA
CTTGTACGAATTCGGGAGGAGGAGGATCCCAGGTGCAGCTGGTTCGAGACCGGGCGGCGACTGGTTCAACCT
GGAGGCAGCCTGAGGCTGTCTTGACCCGCTCAGGCTTCACCTTTAGCATGCACGCAATGACCTGGTACAGGC
AAGCCCCGGTAAACAGAGGGAGCTCGTGGCTGTCATCACAAGCCACGGGGACAGGGCCAACTACACAGATT
CCGTACGGGGCAGATTCACGATCTCCGCGATAATACTAAGAACATGGTGTACCTGCAGATGAACAGTCTGAA
GCCAGAAGACTGCCGTGTATTACTGCAATGTGCCAGGTATGACTCTTGGGGGCAGGGCACCCAGGTGAC
AGTGAGCAGCGGAGGAGGAGGATCCTACCCATACGATGTTCCAGATTACGCTTAGTAG

5DXW-T61V construct

CTGAGATCACCGGCGAAGGAGGGCCACCATGTACAGGATGCAACTCCTGTCTTGCACTGACTAAGTCTTGCA
CTTGTACGAATTCGGGAGGAGGAGGATCCCAGGTGCAGCTGGTTCGAGACCGGGCGGCGACTGGTTCAACCT
GGAGGCAGCCTGAGGCTGTCTTGACCCGCTCAGGCTTCACCTTTAGCATGCACGCAATGACCTGGTACAGGC
AAGCCCCGGTAAACAGAGGGAGCTCGTGGCTGTCATCACAAGCCACGGGGACAGGGCCAACTACGTGGATT
CCGTACGGGGCAGATTCACGATCTCCGCGATAATACTAAGAACATGGTGTACCTGCAGATGAACAGTCTGAA
GCCAGAAGACTGCCGTGTATTACTGCAATGTGCCAGGTATGACTCTTGGGGGCAGGGCACCCAGGTGAC
AGTGAGCAGCGGAGGAGGAGGATCCTACCCATACGATGTTCCAGATTACGCTTAGTAG

Color code : IL-2 signaling peptide Linker Nanobody Linker HA Tag

Supplementary Material 2

Vetor name	Vector type	Promoter	Insert	Ires	Reporter
MSCV empty plasmid	Retrovirus	MSCV	Restriction enzyme sites : BglII – ClaI – HpaI – AgeI – Sall – Mlu I	None	None
MSCV-C7	Retrovirus	MSCV	C7 construct	None	None
MSCV-C7-T57A	Retrovirus	MSCV	C7-T57A construct	None	None
MSCV-5DXW	Retrovirus	MSCV	5DXW construct	None	None
MSCV-5DXW-T61V	Retrovirus	MSCV	5DXW-T61V construct	None	None
pTM898-trunc OVA	Lentivirus	PGK	Truncated Ovalbumin	Yes	Geneticin resistance
pTM899-mPD-L1	Lentivirus	PGK	Full length <i>Cd274</i>	Yes	Puromycin resistance
pTM899-mPD-L2	Lentivirus	PGK	Full length <i>Pdcd1lg2</i>	Yes	Puromycin resistance