

Supplemental Figure 4

PTD/Cell Targeting peptide, DRBD Motif 1, DRBD Motif 2, HA Tag

DRBD

MAGDLSAGFFMEELNTYRQKQGVLKYQELPNSGPPHRRFTFQVIIDGREFPEGEGRS
KKEAKNAAAKLAVEILNKEKKA AALEHHHHHHH

PTD-DRBD

MG**RKKRRQRRR**GHSG**RKKRRQRRR**GHIYPYD**VPDY**AGDPGR**RKKRRQRRR**GDPAGDLS
AGFFMEELNTYRQKQGVLKYQELPNSGPPHRRFTFQVIIDGREFPEGEGRSKKEAKNA
AAKLAVEILNKEKKA AALEHHHHHHH

PPS-DRBD

MG**DSPAHP**SGHSG**DSPAHP**GHIG**DSPAHP**GAPAGDLSAGFFMEELNTYRQKQGVL
KYQELPNSGPPHRRFTFQVIIDGREFPEGEGRSKKEAKNAAAKLAVEILNKEKKA AALE
HHHHHHH

2xDRBD

MGAPAGDLSAGFFMEELNTYRQKQGVLKYQELPNSGPPHRRFTFQVIIDGREFPEGE
GRSKKEAKNAAAKLAVEILNKEKKA VSPLLLTTTNSSEGL**SMGNYIGLINRIAQKKRLTVNY**
EQCASGVHGPEGFHYKCKMGQKEYSIGTGSTKQEAQQLAAKLAYLQILSEETSSVKSDHH
HHHH

PTD-2xDRBD

MG**RKKRRQRRR**GHSG**RKKRRQRRR**GHIYPYD**VPDY**AGDPGR**RKKRRQRRR**GAPAGDLS
AGFFMEELNTYRQKQGVLKYQELPNSGPPHRRFTFQVIIDGREFPEGEGRSKKEAKN
AAAKLAVEILNKEKKA VSPLLLTTTNSSEGL**SMGNYIGLINRIAQKKRLTVNYEQCASGVHG**
PEGFHYKCKMGQKEYSIGTGSTKQEAQQLAAKLAYLQILSEETSSVKSDHHHHHHH

PPS-2xDRBD

MG**DSPAHP**SGHSG**DSPAHP**GHIG**DSPAHP**GAPAGDLSAGFFMEELNTYRQKQGVLK
YQELPNSGPPHRRFTFQVIIDGREFPEGEGRSKKEAKNAAAKLAVEILNKEKKA VSPLLL
TTNSSEGL**SMGNYIGLINRIAQKKRLTVNYEQCASGVHGPEGFHYKCKMGQKEYSIGTGS**
TKQEAQQLAAKLAYLQILSEETSSVKSDHHHHHHH

Supplemental Figure 4, cont.

1xTAT-2xDRBD

MG**RKKRRQRRR**GAPAGDLSAGFFMEELNTYRQKQGVLKYQELPNSGPPHRRRFTFQVI
IDGREFPEGEGRSKKEAKNAAAKLAVEILNKEKKAVSPLLLTTTNSSEG**LSMGNYIGLINRIA**
QKKRLTVNYEQCASGVHGPEGFHYKCKMGQKEYSIGTGSTKQEAQQLAAKLAYLQILSEE
TSVKSDHHHHHH

Pen-2xDRBD

M**GRQIKIWFQNRRMKWKK**GGSGGSGGSGGSGGSGGSGGSGGSGGAPAGDLSAGFFME
ELNTYRQKQGVLKYQELPNSGPPHRRRFTFQVIIDGREFPEGEGRSKKEAKNAAAKLAV
EILNKEKKAVSPLLLTTTNSSEG**LSMGNYIGLINRIAQKKRLTVNYEQCASGVHGPEGFHYK**
CKMGQKEYSIGTGSTKQEAQQLAAKLAYLQILSEETSSVKSDHHHHHH

B2-2xDRBD

MG**GHKVKRPKG**GHSG**GHKVKRPKG**GHIG**GHKVKRPKG**GAPAGDLSAGFFMEELNTYRQ
KQGVLKYQELPNSGPPHRRRFTFQVIIDGREFPEGEGRSKKEAKNAAAKLAVEILNKEKK
AVSPLLLTTTNSSEG**LSMGNYIGLINRIAQKKRLTVNYEQCASGVHGPEGFHYKCKMGQKE**
YSIGTGSTKQEAQQLAAKLAYLQILSEETSSVKSDHHHHHH

Supplemental Fig. 3. Primary amino acid sequence of each of fusion protein. TAT or receptor/cell targeting motifs are shown in red. PKR DRBD motif 1 is shown in blue and DRBD motif 2 in orange. The HA epitope is in green, and linker regions and the six-histidine tags are shown in black.