Mission lentiviral control vectors

When conducting experiments using MISSION shRNA clones, proper controls are a key element of experimental design to permit accurate interpretation of knockdown results and provide assurance of the specificity of the response observed. The MISSION Control Vectors are lentiviral-based vectors that are useful as both positive and negative controls in experiments using the MISSION shRNA library. The DNA format controls may be used in direct transfection of target cells or they may also be used to create replication-incompetent viral particles.

The control vectors listed below in the Control Selection Table are held by the shRNA Shared Technology Resource. Further information on finding the appropriate controls for your experiments can be found at the Sigma Mission website: http://www.sigmaaldrich.com/life-science/functional-genomics-and-rnai/shrna/trc-shrna-products/shrna-controls.html or if you have questions contact the core director.

Control Selection Table

Catalog Number Description	**Vector Backbone**	**Insert**	**Insert Sequence / Vector Description**
SHC001 MISSION pLKO.1-puro Empty Vector Control	TRC1/1.5	No hairpin	No shRNA Insert
SHC002 MISSION pLKO.1-puro Non-Mammalian shRNA Control	TRC1/1.5	Non human or mouse shRNA	CCGG**CAACAAGATGAAGAGCACCAA**CTC-GAG**TTGGTGCTCTTCATCTTGTTG**TTTTT
SHC003 MISSION pLKO.1-puro-CMV-TurboGFP™ Positive Control	TRC1/1.5	No hairpin	No shRNA insert. Contains TurboGFP gene, under the control of the CMV promoter. TurboGFP is an improved variant of the green fluorescent protein copGFP cloned from the copepoda *Pontellina plumata*.
SHC201 MISSION TRC2 pLKO.5-puro Empty Vector Control	TRC2	No hairpin	No shRNA Insert
SHC002 MISSION pLKO.1-puro Non-Mammalian shRNA Control	TRC2	Non human or mouse shRNA	CCGG**CAACAAGATGAAGAGCACCAA**CTC-GAG**TTGGTGCTCTTCATCTTGTTG**TTTTT
SHC203 MISSION TRC2 pLKO.5-puro-CMV-TurboGFP™ Positive Control	TRC2	No hairpin	No shRNA insert. Contains TurboGFP gene, under the control of the CMV promoter. TurboGFP is an improved variant of the green fluorescent protein copGFP cloned from the copepoda *Pontellina plumata*.

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