RPL22L1 Validation plan

**Specific Aim 1: Determine the effect of RPL22L1 loss on MDM4 splicing**

1. Loss of function experiments targeting RPL22L1 in RPL22L1 expressing cells:

*Select cell lines with high RPL22L1 expression that tolerate RPL22L1 knockout*

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| MDM4-L, MDM4ko Sensitive, RPL22L1ko Resistant | JHOC5\_OVARY |
| A549\_LUNG |

|  |  |
| --- | --- |
| MDM4-L, RPL22L1ko-Resistant, p53 Mut | ES2\_OVARY |
| HCC461\_LUNG |

CRISPR reagent selection:

Test 4 RPL22L1 guides for knockout using qPCR and MDM4 isoforms

Alternative western blot

*Select cell lines with high RPL22L1 expression that are sensitive to RPL22L1 knockout*

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| MDM4-L, RPL22L1ko-sensitive, MDM4ko Sensitive | SNGM\_ENDOMETRIUM |
| SNU1\_STOMACH |