

Supplementary Table 7: Gene Ontology analyses of Common Insertion Sites retrieved from *Cdkn2a*^{-/-} mice injected with the different SIN LVs

System (a)	Gene Class (b)	Count (c)	P_Value (d)
Biological Process	Regulation of protein kinase cascade	4	1.50E-02
Biological Process	Positive regulation of protein kinase cascade	3	3.40E-02
Molecular Function	GTPase regulator activity	5	3.10E-02
Molecular Function	Nucleoside-triphosphatase regulator activity	5	3.30E-02
KEGG PATHWAY	MAPK signaling pathway	5	1.00E-02
BIOCARTA	MAPKinase Signaling Pathway	3	4.00E-02

- a) System: classification system.
- b) Gene classes: gene categories contained in the BP and MF systems. Gene classes were retrieved if identified by at least 3 genes.
- c) Count: number of genes that are contained in that gene class
- d) P_Value: Significance of the overrepresentation of that class