



# siPOOL<sup>TM</sup> Cancer Toolbox

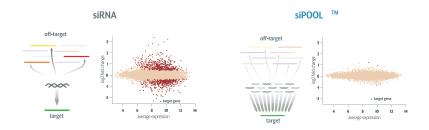
Manipulate Multiple Cancer Pathways Easily and Reliably



The **siPOOL Cancer Toolbox** is a flexible, reliable research solution used for the disruption of key cancer regulatory genes.

### **Key benefits**

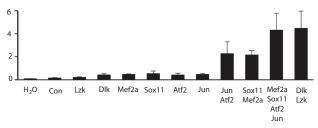
Quick and reliable loss-of-function phenotypes



Whole-transcriptome expression analysis of HeLa cells treated with single siRNA or siPOOL (containing same siRNA) at 3 nM after 48 h (Hannus et al., Nucleic Acids Res, 2014)

The high specificity and efficiency of gene silencing with siPOOLs ensures reliable loss-of-function phenotypes. Easily applied across many cell lines, siPOOLs produce effects within days.

Ideal for combinatorial silencing of multiple genes or isoforms



Survival assay of retinal ganglion cells demonstrated synergistic gene interactions elucidated by combinatorial application of siPOOLs (Welsbie et al., Neuron, 2016)

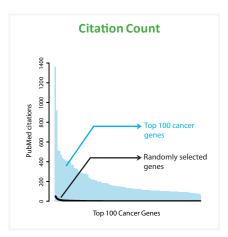
siPOOLs efficiently silence genes at low nanomolar concentrations. Multiple siPOOLs can be applied together without risk of toxicity to study functional interactions, target multiple isoforms, or disrupt several pathways at once.

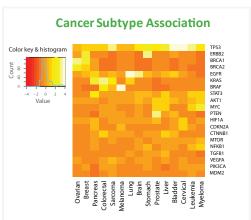


#### What you get

Your choice of siPOOLs against the top 100 cancer genes

Build your siPOOL Cancer Toolbox by choosing ≥ 10 siPOOLs against 100 of the most highly cited cancer genes. With 46 established oncogenes/tumour suppressors, these genes regulate diverse processes ranging from DNA repair, immune responses and cell cycle control.





#### **Guaranteed gene silencing**

All siPOOLs are guaranteed to silence target genes by  $\geq$  70% under optimal transfection conditions at 10 nM. A free siPOOL re-design, validation and delivery will be made if this condition is not met.



Real-time qPCR of the top 20 cancer genes after siPOOL application at 1 nM in standard cell lines (A549, MCF7, Hek293)



### **Ordering information**

The siPOOL Cancer Toolbox is available from 1 - 10 nmol scales in two formats:

Basic siPOOL Cancer Toolbox contains 10-19 siPOOLs

Extended siPOOL Cancer Toolbox contains ≥ 20 siPOOLs

Custom gene extensions are possible

Please contact us or our distributors (About > Distributors on our website) for the top 100 cancer gene list and pricing.

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#### References:

Hannus, M. et al. siPools: highly complex but accurately defined siRNA pools eliminate off-target effects. Nucleic Acids Res. 42, 8049–61 (2014).

Welsbie, D. S. et al. Enhanced Functional Genomic Screening Identifies Novel Mediators of Dual Leucine Zipper Kinase-Dependent Injury Signaling in Neurons. Neuron 94, 1142–1154.e6 (2017).

