

siRNA Selection Guide

Thermo Scientific Dharmacon Products

	ON-TARGET ^{plus} ®	siGENOME®	Accell®
Knockdown and Specificity			
Knockdown potency	Guaranteed 75% knockdown by SMARTpool® and 3 of 4 siRNAs.		Typical SMARTpool results show > 70% silencing. Results may vary in highly difficult-to-transfect cells.
Chemically modified for specificity	All siRNAs modified on both strands for high target specificity and reduced off-targets.	~20% of siRNAs are ON-TARGET® modified when analysis indicates potential for sense-strand bias loading into RISC.	All siRNAs modified for delivery, stability, and enhanced specificity to target.
Designs optimized for specificity	Seed region analysis to reduce 3'UTR miRNA-like interactions, designs filtered for toxic motifs and miRNA seed region motifs.		
Lipid-induced off-targets and toxicity	Potential. Sensitivity depends on transfection reagent and conditions.		None. siRNAs are modified for delivery with no transfection reagent required.
Delivery Efficiency			
Uptake by difficult-to-transfect cells	Delivery method-dependent; optimization required.		Yes. Delivery to difficult-to-transfect cells with no transfection reagent.
Product Formats			
Available formats	SMARTpool and four individual siRNAs per gene.		
Libraries available	Yes		
Silencing Durations			
Extended duration silencing (10+ days)	Typical siRNA-mediated silencing is 5-7 days in duration, depending on transfection efficiency, cellular growth rates and protein turnover.		Application note available describing extended-duration knockdown (up to 30 days) with optimized continuous application.
Stable cell line creation	No		