

GeneHero™ CRISPRa/i Stable Cell Lines

GeneHero™ CRISPRa and CRISPRi Stable Cell Lines are mammalian cell lines stably expressing synergistic activation mediators (SAM) or transcriptional repressor peptides for the study of transcriptional activation or inhibition of endogenous genes and protein expression.

Application

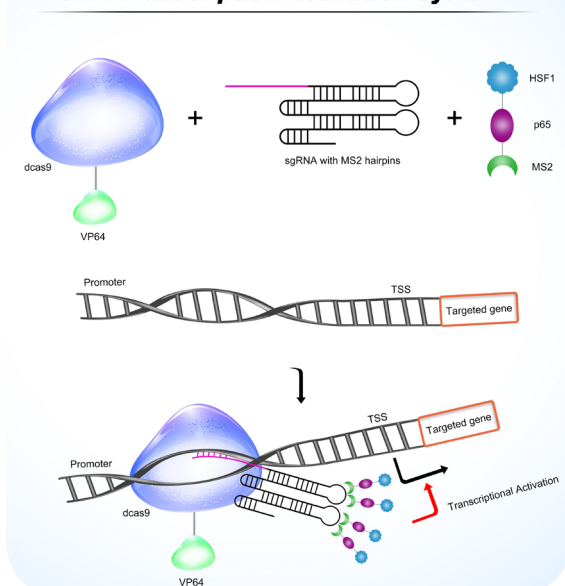
- ◆ Endogenous gene overexpression (CRISPRa) or knockdown (CRISPRi);
- ◆ Gain- or loss-of-function screening with targeted drugs
- ◆ Study of gene interactions and pathway relationships

Advantages

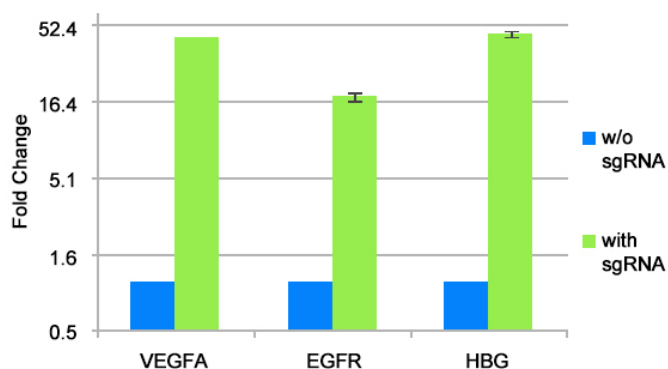
- ⊙ Stable cell lines with verified genome integration and high level expression of dCas9-VP64/MPH (CRISPRa) or dCas9-KRAB (CRISPRi)
- ⊙ Minimizes the need for co-transfection or co-transduction of CRISPR activation/repression mediators
- ⊙ Compatible with high-throughput functional screening with sgRNA libraries

GeneHero™ CRISPRa Stable Cell Lines

SAM Transcription Activation System

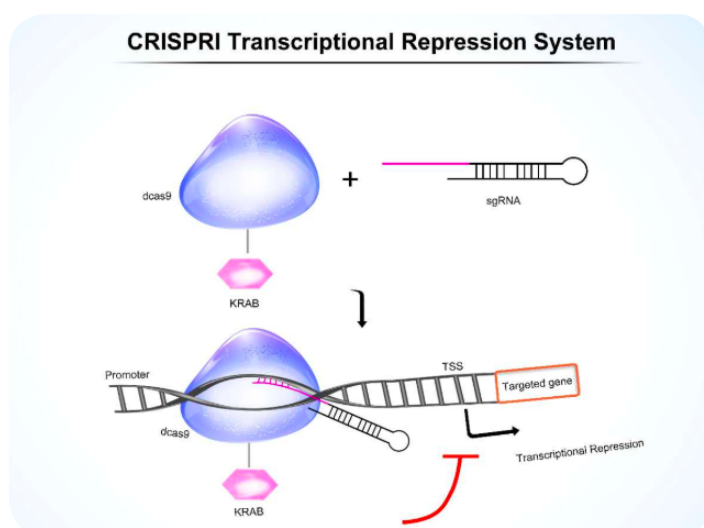


CRISPR Transcription Activation Cell Lines

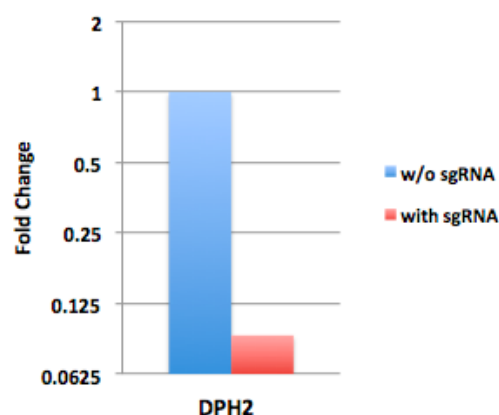


As shown in the figures above, transcription activation of VEGFA, EGFR and HBG in CRISPRa cell line SL302. The transcription levels of VEGFA, EGFR and HBG are normalized to those of GAPDH in the same cell line. The CRISPRa cell lines transduced with sgRNA for the promoter of VEGFA, EGFR and HBG, respectively, are shown in green; those without sgRNA transduction are shown in blue.

GeneHero™ CRISPRi Stable Cell Lines



CRISPR Transcription Inhibition



As shown in the figures above, transcription inhibition of DPH2 in CRISPRi cell line SL372. The transcription levels of DPH2 are normalized to those of GAPDH in the same cell line. The CRISPRi cell line transduced with sgRNA for the promoter of DPH2 is shown in red; that without sgRNA transduction is shown in blue.

CRISPRa Stable Cell Lines

Catalog#	Cell Line	SAM	Selection Marker	Description
SL302	HEK293	dCas9-VP64/MPH	Blasticidin Hygromycin	HEK293 stably expressing dCas9-VP64 and MPH complex
SL304	MCF7	dCas9-VP64/MPH	Blasticidin Hygromycin	MCF7 stably expressing dCas9-VP64 and MPH complex

CRISPRi Stable Cell Lines

Catalog#	Cell Line	CRISPRi	Selection Marker	Description
SL371	HEK293	dCas9-KRAB	Blasticidin	HEK293 stably expressing dCas9-KRAB
SL372	HeLa	dCas9-KRAB	Blasticidin	HeLa stably expressing dCas9-KRAB

Contact us:

GeneCopoeia, Inc.

9620 Medical Center Dr. Suite 101,
Rockville, MD 20850 USA

Email
Tel
Toll free
Fax
Website

inquiry@genecopoeia.com
+1 (301) 762-0888
+1 (866) 360-9531
+1 (301) 762-3888
www.genecopoeia.com