

TG0045

Gene Name: *Kcna10*

Scientist: Dr. Thomas B. Friedman

Organization: National Institute on Deafness & Other Communication Disorders
(NIDCD)

Accession #: XM_143471

Gene name and accession:	NM_001081140 (<i>Kcna10</i>)	Date of Submission:	5-19-08
Mutation Type:	X Standard Knock out	Is this gene X-linked?	No
	<input type="checkbox"/> Conditional	Genetics background of target vector and ES cells:	129SvEvBrd

Required Materials: pKOS clone DNA(s) ___N/A___
 Targeted ES Cell DNA ___1D11___
 Genomic Map

Southern Blot Analysis:

External/Internal Probe Strategies

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	9+10	11+12
Restriction Enzyme for Genomic Digest:	StuI	EcoRI
Predicted Wild-type Band (kb):	9.7	7.8
Predicted Mutant Band (kb):	14.2	8.7
Probe Size (bp):	253	229

PCR Strategies:

Wild type-specific (absent in targeted allele)		Mutation-specific product (absent in wt)	
5' Primer Name:	15	5' Primer Name:	15
3' Primer Name:	16	3' Primer Name:	GT
Predicted Wild-type Band (bp):	246	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	404

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Selection Cassette:

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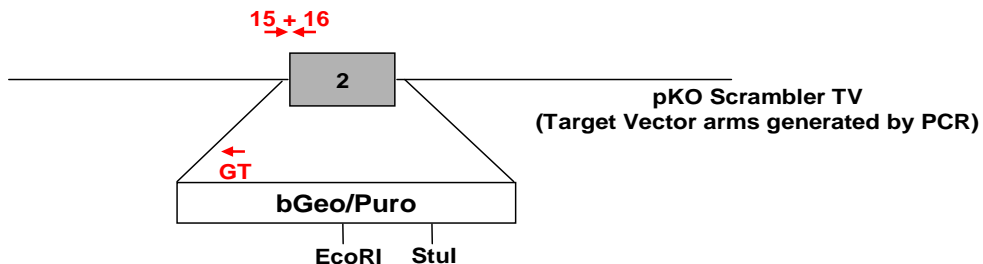
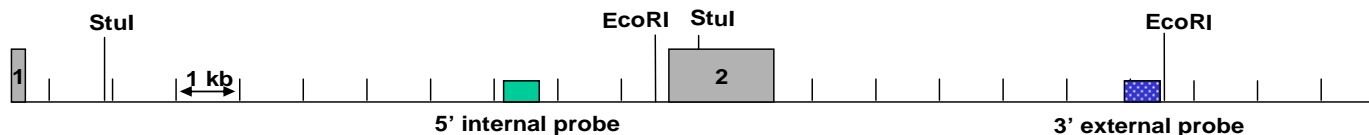
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Kcna10 Targeting Strategy



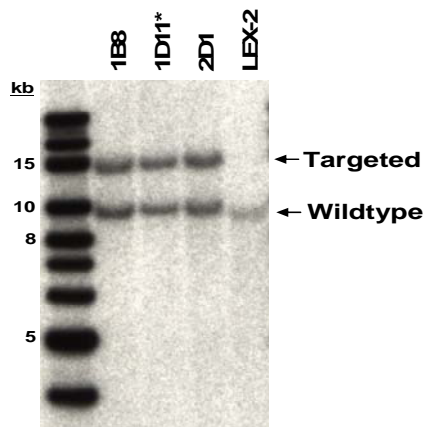
Southern Strategies:

Probe	5' internal	3' external
Enzyme	Stul	EcoRI
Wildtype	9.7kb	7.8kb
Targeted	14.2b	8.7kb

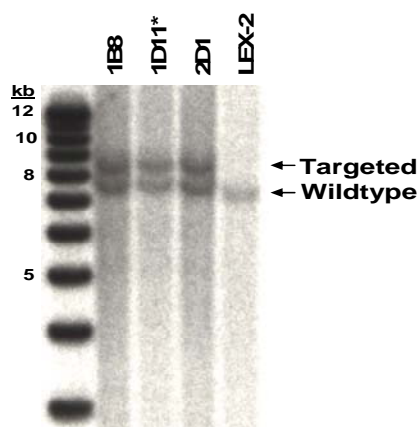
PCR Strategies

Strategy	WT-specific	Mutant-specific
Primers	15 + 16	15 + GT
Wildtype	246 bps	-----
Targeted	-----	404 bps

Kcna10 Southern Data



5' internal probe
Stul digests
Wildtype 9.7kb
Targeted 14.2 kb



3' external probe
EcoRI digests
Wildtype 7.8 kb
Targeted 8.7 kb

*Clones achieving germline transmission