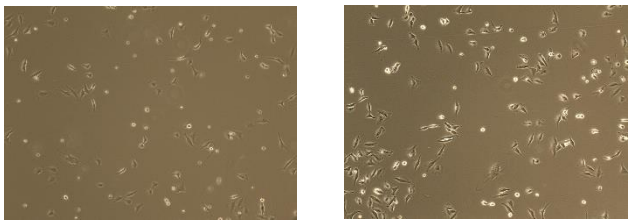
Institut-Hôpital neurologique de Montréal
Montreal Neurological Institute-Hospital

GENE KNOCKOUT: FUS

Product Information		
Cell Line	HELA FUS Knockout	
Parental	HELA	
Product ID	HELA-FUS KO 28	
Product Batch	HEL-FUS-28-191112	
Genotype	CRISPR/cas9-edited	
Passage	P23	
Date of Production	2017-11-01	
Properties		
Volume	1 ml/vial	
Storage Conditions	Liquid Nitrogen	
Cell Number/ Vial	$5.21x10^5$ cells/ml	
Viability	58%	
Quality Control		
Test	**Test Method**	**Pass/Fail**
Viability	Post thawing culture	Pass
Mycoplasma	MycoAlert™ Mycoplasma Detection Kit (Lonza)	Pass
Cell Line Characterization	Sanger Sequencing (DNA)	Pass
Morphology Images	10x objective 24h Post-Thaw 48h Post-Thaw 	
Growth Conditions		
Culture Media	Dulbecco's Modified Eagle's Medium (DMEM) supplemented with FBS 10%, L-glutamine 2mM, Penicillin-Streptomycin 100U/ml	
Passage Method	Trypsin	
Freezing Media	FBS with 10% DMSO	
Recommended Subculture	Cells are cultured as a monolayer at 37°C in a humidified atmosphere with 5% CO_2. Cells should be passaged every 5-7 days. Split at 80-85% confluency, approximately 1:10-1:20.	
Cell Line Revival	Rapidly thaw cells in a 37°C water bath. Transfer contents into a tube containing 5 ml pre-warmed media. Centrifuge cells, remove supernatant wash cells with 10 ml PBS, centrifuge cells, remove PBS and seed into a 10 cm flask containing pre-warmed media.	

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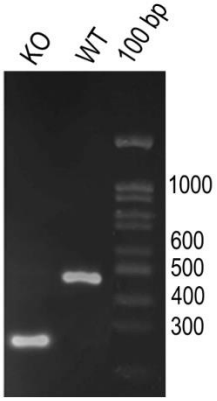
Cell Line Characterization (DNA)	
Target Gene	FUS
Guide RNA Sequence	1. AGGGAGUCACAAAAGCCACC 2. GGUACGGUGGUGUUGAUGUC
Genomic Location	Chromosome 16: 31,180,110-31,194,871 forward strand
Gene	FUS ENSG00000089280
Target Protein	FUS RNA binding protein
Mutation	Deletion in exon 4 of 194bp in 1 allele and 193bp in another allele
Forward Primer	**Reverse Primer**
CCTTGGGCCTGGGTTTAGAG	TCACCCCTCTTTTCAAGCCT

PCR Products

Image description: PCR products of FUS KO clone along with WT were resolved on 2% agarose gel



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Sequence Alignment

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2)

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