abcam

Product datasheet

Human BNP knockout HeLa cell line ab277072

1 Image

Overview

Product name	Human BNP knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 112bp deletion in exon 2.
Passage number	<20
Knockout validation	Sanger Sequencing
Biosafety level	2
General notes	Recommended control: Human wild-type HeLa cell line (ab275466).
	Cryopreservation cell medium: Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.
	Culture medium: McCoY5a + 10% FBS
	Initial handling guidelines: Upon arrival, the vial should be stored in liquid nitrogen vapor phas and not at -80°C. Storage at -80°C may result in loss of viability.
	 Thaw the vial in 37°C water bath for approximately 1-2 minutes. Transfer the cell suspension (0.8 mL) to a 15 mL/50 mL conical sterile polypropylene centrifug tube containing 8.4 mL pre-warmed culture medium, wash vial with an additional 0.8 mL culture medium (total volume 10 mL) to collect remaining cells, and centrifuge at 201 x g (rcf) for 5 minutes at room temperature. 10 mL represents minimum recommended dilution. 20 mL represents maximum recommended dilution. Resuspend the cell pellet in 5 mL pre-warmed culture medium and count using a haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of 2x10⁴ cells/cm². Seeding density is given as a guide only and should be scaled to align with individual lab schedules. Incubate the culture at 37°C incubator with 5% CO₂. Cultures should be monitored daily.
	 Subculture guidelines: All seeding densities should be based on cell counts gained by established methods. A guide seeding density of 2x10⁴ cells/cm² is recommended. A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required. Cells should be passaged when they have achieved 80-90% confluence. This product is subject to limited use licenses from The Broad Institute and ERS Genomics Limited, and is developed with patented technology. For full details of the limited use licenses an

relevant patents please refer to our *limited use license* and *patent pages*.

We will provide viable cells that proliferate on revival.

Properties

Number of cells	1 x 10 ⁶ cells/vial, 1 mL
Adherent /Suspension	Adherent
Tissue	Cervix
Cell type	epithelial
Disease	Adenocarcinoma
Gender	Female
Mycoplasma free	Yes
Storage instructions	Shipped on Dry Ice. Store in liquid nitrogen.
Storage buffer	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether
Target	
Relevance	Brain natriuretic peptide (BNP) circulates in blood as a peptide hormone with natriuretic, vasodilatory and renin inhibitory properties. BNP is secreted predominantly by the left ventricular myocytes in response to volume expansion and pressure overload. BNP belongs to a family of structurally similar peptide hormones, which includes atrial natriuretic peptide (ANP), BNP, C type natriuretic peptide (CNP) and urodilatin. These peptides are characterized by a common 17 amino acid ring structure with a disulfide bond between two cystein residues. This ring structure shows high homology between different natriuretic peptides (eleven of the 17 amino acid residues are homologous in the ring of each of the natriuretic peptides). BNP is a 32 amino acid peptide with disulfide bond between the cysteine residues Cys10 and Cys26. In earlier studies it has been demonstrated that BNP concentration in blood increases with the severity of congestive heart failure. Quantitative measurement of BNP in blood provides an objective indicator of congestive heart failure severity.

Images

КО	CAGGAGCAGCGCAACCATTT
WT	cagerclaccelaccriticlageclarctercegrectecagetegrecagertegreccctceregreccctcrage
КО	CGTGGGCACCGCALAATGGT
WT	AGAGCCCCCGTCCCACAGGTGTCTGGAAGTCCCGGGAGGTAGCCACCGAGGGCATCCGTGGGCACCGCAAAATGGT
Sa	nger Sequencing - Human BNP knockout HeLa
се	II line (ab277072)

Allele-1: 112 bp deletion in exon 2

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