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Product Sheet

H_MICA*001 HEK-293 Cell Line

Catalog number: GM-C24921

Version 4.0.26.1030

Specifications

Description	H_MICA*001 HEK-293 Cell Line is a clonal stable HEK-293 cell line that constitutively expresses the human MICA*001 gene, constructed using lentiviral technology.
Quantity	5E6 Cells per vial,1 mL
Product Format	1 vial of frozen cells
Shipping	Shipped on dry ice
Storage Conditions	Liquid nitrogen immediately upon receipt
Target	Human_MICA*001
Gene ID/Uniprot ID	Q29983-1
Host Cell	HEK-293
Recovery Medium	DMEM+10% FBS+1% P.S
Growth medium	DMEM+10% FBS+1% P.S+0.75 μg/mL Puromycin
Note	None
Freezing Medium	90% FBS+10% DMSO
Growth properties	Adherent
Growth Conditions	37°C, 5% CO_2
Mycoplasma Testing	The cell line has been screened to confirm the absence of Mycoplasma species.
Safety considerations	Biosafety Level 2
Note	It is recommended to expand the cell culture and store a minimum of 10 vials at an early passage for potential future use.

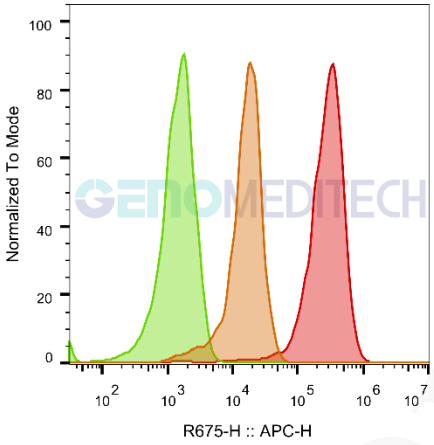
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Materials

Reagent	Manufacturer/Catalogue No.
DMEM	Gibco/C11995500BT
Fetal Bovine Serum	ExCell/FSP500
Pen/Strep	Thermo/15140-122
Puromycin	Genomeditech/GM-040401
Anti-MICA/MICB hIgG1 Antibody(36 NF G236A)	Genomeditech/GM-48843AB
CLN-619 (anti-MICA)	aladdin/Ab209797
Countess 3 Automated Cell Counter	ThermoFisher/A49891
NovoCyte Flow Cytometer	Agilent/NovoCyte 2060R

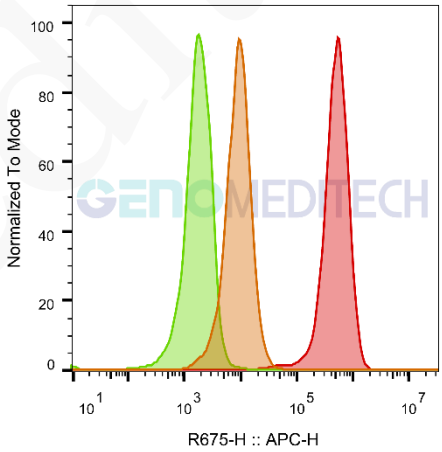
Data

Expression



SampleID	Geometric Mean : R675-H
HEK-293 anti-MICA/MICB+APC-2nd Ab	15248
HEK-293 H_MICA H_IgG+APC-2nd Ab	1366
HEK-293 H_MICA anti-MICA/MICB+APC-2nd Ab	254504

H_MICA*001 HEK-293 Cell Line (Cat. GM-C24921) was determined by flow cytometry using Anti-MICA/MICB hIgG1 Antibody(36 NF G236A) (Cat. GM-48843AB).



SampleID	Geometric Mean : R675-H
HEK-293 anti-MICA+APC-2nd Ab	8759
HEK-293 H_MICA H_IgG+APC-2nd Ab	1706
HEK-293 H_MICA*001 anti-MICA+APC-2nd Ab	4.74E5

H_MICA*001 HEK-293 Cell Line (Cat. GM-C24921) was determined by flow cytometry using CLN-619 (anti-MICA) (aladdin/Ab209797).

Cell Recovery

Recovery Medium: DMEM+10% FBS+1% P.S

To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

a) Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 - 3 minutes).
b) Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
c) Transfer the vial contents to a centrifuge tube containing 5.0 mL complete culture medium and spin at approximately 176 x g for 5 minutes. Discard supernatant.
d) Resuspend cell pellet with the recommended recovery medium. And dispense into appropriate culture dishes.
e) Incubate the culture at 37°C in a suitable incubator. A 5% CO_2 in air atmosphere is recommended if using the medium described on this product sheet.

Cell Freezing

Freezing Medium: 90% FBS+10% DMSO

a) Centrifuge at 176 x g for 3 minutes to collect cells.
b) Resuspend the cells in pre-cooled freezing medium and adjust the cell density to 5E6 cells/mL.
c) Aliquot 1 mL into each vial.
d) Place the vial in a controlled-rate freezing container and store at -80°C for at least 1 day, then transfer to liquid nitrogen as soon as possible.

Cell passage

Growth medium: DMEM+10% FBS+1% P.S+0.75 μg/mL Puromycin

For the first 1 to 2 passages post-resuscitation, use the recovery medium. Once the cells have stabilized, switch to a growth medium.

a) Subculturing is necessary when the cell density reaches 80%. It is recommended to perform subculturing at a ratio of 1:3 to 1:4 every 2-3 days. Ensure that the density does not exceed 80%, as overcrowding can lead to reduced viability due to compression.
b) Remove and discard culture medium.
c) Briefly rinse the cell layer with PBS to remove all traces of serum that contains trypsin inhibitor.
d) Add 1.0 mL of 0.25% (w/v) Trypsin-EDTA solution to dish and observe cells under an inverted microscope until cell layer is dispersed (usually within 30 to 60 seconds at 37°C).
e) Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
f) Add 2.0 mL of growth medium to mix well and aspirate cells by gently pipetting.
g) After centrifugation, resuspend the pellet and add appropriate aliquots of the cell suspension to new culture vessels.
h) Incubate cultures at 37°C.

Subcultivation Ratio: A subcultivation ratio of 1:3 - 1:4 is recommended

Medium Renewal: Every 2 to 3 days

Notes

a) Upon initial thawing, a higher number of dead cells is observed, which is a normal phenomenon. Significant improvement is seen after adaptation. Once the cells reach a stable state, the number of dead cells decreases after subculturing and the cell growth rate becomes stable.

b) Ensure that the cell density does not exceed 80%, as overcrowding may lead to reduced viability due to compression.

Sequence

MICA*001 Q29983-1

MGLGPVFLLLAGIFPFAPPGAAAEPHSLRYNLTVLSWDGSVQSGFLTEVHLDGQPFLRCDRQKCRAKPQGQWAE
DVLGNKTWDRETRDLTGNGKDLRMTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNLETK
EWTMPQSSRAQTLAMNVRNFLKEDAMKTKTHYHAMHADCLQELRRYLKSGVVLRRTVPPMVNVTRSEASEG
NITVTCRASGFYPWNITLSWRQDGVSLSHDTQQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHST
HPVPSGKVLVLQSHWQTFHVSAVAAAAIFVIIIFYVRCCKKKTSAAEGPELVSLQVLDQHPVGTSDHRDATQLGF
QPLMSDLGSTGSTEGA*

Related Products

MICA;MICB	
Cynomolgus_MICA(AAO24115) CHO-K1 Cell Line	Cynomolgus_MICA(Q2MGE0-1) CHO-K1 Cell Line
Cynomolgus_MICB CHO-K1 Cell Line	H_MICA*001 CHO-K1 Cell Line
H_MICA*001 Luciferase B16-F10 Cell Line	H_MICA*001 MC38 Cell Line
H_MICA*008 CHO-K1 Cell Line	H_MICB CHO-K1 Cell Line
H_MICB HEK-293 Cell Line	
Anti-MICA/MICB hIgG1 Antibody(36 NF G236A)	Anti-MICA/MICB mIgG2a Antibody(7C6)
Anti-MICA/MICB mIgG2a Antibody(PDI-01)	
Cynomolgus MICA Protein; His Tag	Human MICA*001 Protein, His Tag (Q29983-1)
Human MICA*008 Protein; His Tag (Q96QC4)	
NKG2D	
H_NKG2D Blockade Reporter Jurkat Cell Line	Cynomolgus_NKG2D CHO-K1 Cell Line
H_NKG2D CHO-K1 Cell Line	H_NKG2D HEK-293 Cell Line
Anti-H_KLRK1(NKG2D) hIgG4 Antibody(Tesnatilimab)	Anti-NKG2D hIgG1 Antibody(A49MI)
Cynomolgus NKG2D Protein; His Tag	Human NKG2D Protein; His Tag

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