

Human iPSC derived Melanocytes - Asian

PCi-MEL_ASI

Description

Product Ref. PCi-MEL_ASI_1M

Associated product: PhenoCULT®-MEL culture medium.

Phenocell provides Melanocytes (PCi-MEL) developed from human induced pluripotent stem cells (iPSC) at low passage (p3-P4) to allow amplification. PCi-MEL are cryopreserved in the vapor phase of liquid nitrogen. A post-thaw regrowth test is performed on each batch. Viability after thawing is > 90%. A protocol for thawing and culture is available at [PCi-MEL_Culture Protocol](#). Shipping is on dry ice.

PCi-MEL are available in 10⁶ cell/vial format.

Product Information

Product	Catalog No.	Quantity	Donor
Human iPSC-derived Melanocytes	PCi-MEL_CAU_1M	10 ⁶ cell/vial	Caucasian (Phototype III-IV)
Human iPSC-derived Melanocytes	PCi-MEL_ASI_1M	10 ⁶ cell/vial	Asian (Phototype IV-V)
Human iPSC-derived Melanocytes	PCi-MEL_AFR_1M	10 ⁶ cell/vial	African (Phototype VI)

- Each lot is tested for expression of melanocytes markers and for absence of mycoplasma.
- Storage conditions : Product stable at -135°C or colder. Storage in the vapor phase of a liquid nitrogen storage tank is recommended.
- Expiration : Guaranteed for up to 12 months from date of receipt if properly stored. Use cells immediately after thawing.

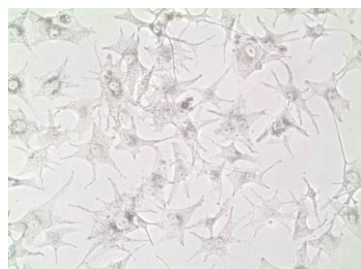
Product Use

PCi-MEL are intended for in **vitro research use only** and are not to be used for any other purpose, which includes, but is not limited to, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals.

Quality testing and results

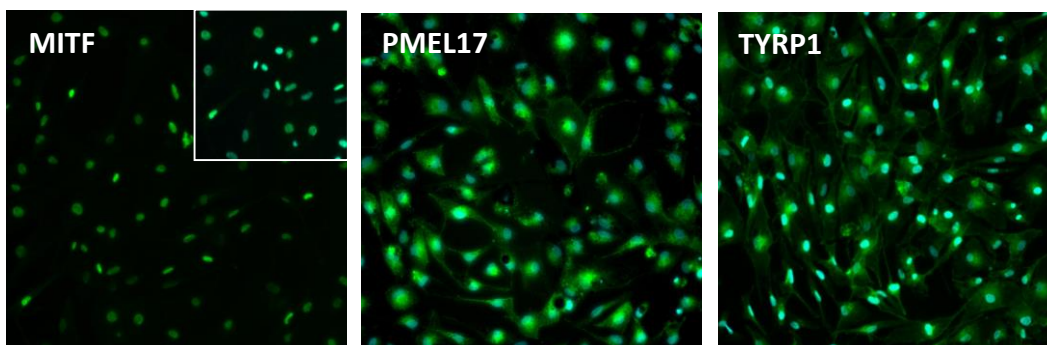
Refer to lot-specific Certificate of Analysis. PCi-MEL are derived from qualified human iPSC and have been validated for high expression levels of specific markers. PCi-MEL display normal karyotype and tested negative for mycoplasma before freezing.

▪ **Morphology**



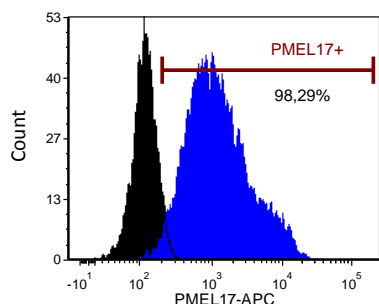
When cultured in PhenoCULT®-MEL on fibronectine, PCi-ME_ASI display conspicuous pigmentation. PhenoCULT®-MEL optimizes PCi-MEL expansion. A more elongated morphology is acquired after final maturation when proliferation ceases.

▪ **Immunohistochemistry for melanocyte markers**



PCi-MEL_ASI express key melanocyte markers, including Microphthalmia associated transcription factor (MITF), Tyrosinase Related Protein 1 (TYRP1) and Premelanosome Protein (PMEL17), two proteins required for melanin production.

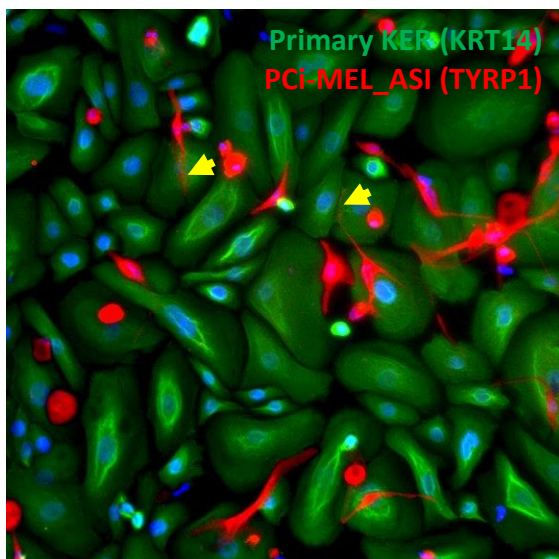
▪ **Flow cytometry analysis**



PCi-MEL_ASI purity is above 95% by PMEL17 expression.

Black : isotype control ; Blue : PMEL17 antibody

▪ **Functional analysis : Melanosomes transfer to keratinocytes**



PCi-MEL_ASI transfer melanosomes to primary keratinocyte (pKER) as evidenced by the presence of TYRP1 labelled melanosomes within KRT14 expressing pKER (yellow arrows). TYRP1 labelled melanosomes organize around the nuclei of pKER.

Routine culture and amplification

We recommend PhenoCULT®-MEL for PCi-MEL_ASI culture on fibronectin-coated tissue culture surface. All PCi-MEL also grow on primary melanocyte culture medium.

[Contact us](#) for more information and ordering PhenoCULT®-MEL (Product reference: [PhenoCULT®-MEL](#)).

Areas of interest

Melanocytes are distributed in the epidermis, hair follicles, mucosa, cochlea (ear), iris (eye), and mesencephalon (brain). Melanocytes produce melanin, a pigment concentrated into specialized structures, the melanosomes. Pigmentation disorders include hypopigmentation, hyperpigmentation and mixed hyper-/hypopigmentation disorders.

Areas of interest include melanocyte research, pharmacology, toxicology and drug discovery for pigmentation disorders.

Safety precautions

Handle the frozen vials with due caution. This product should be treated as potentially infectious and only used following appropriate handling precautions such as those described in biological safety level 2. Do not use sharps such as needles and syringes when handling this product.

Do not ingest. In case of contact with eyes, rinse immediately with plenty of water for at least 15 min and seek medical advice.

Environmental measures : soak up with inert absorbent material. Clean with bleach and rinse thoroughly. Prevent further leakage or spillage if safe to do so.

Phenocell can not be held liable for any damage or losses resulting from the handling or from contact with the product as described herein.

Phenocell can not guarantee the biological function or any other properties associated with performance of the product in researchers' individual culture systems. Phenocell guarantees that the product will meet the specifications only when assessed immediately after thawing using the [recommended Protocol](#).

FOR RESEARCH USE ONLY. Not intended for human or animal diagnostic, therapeutic or clinical applications.

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