Clonetics™ Normal Human Osteoblast Cell System

**NHOst**

**Introduction**

Clonetics™ Osteoblast Cell System contains Normal Human Osteoblasts (NHOst) and optimized medium for their growth. Each system can quickly generate NHOst cultures for experimental applications in bone research, physiology, cellular function and differentiation. Clonetics™ Osteoblast Cell System is convenient and easy to use, allowing the researcher to focus on results. Cryopreserved NHOst are shipped in second or third passage. Proliferating NHOst are shipped in third or fourth passage. Clonetics™ Cells, Medium and Reagents are quality tested together and guaranteed to give optimum performance as a complete Cell System.

**Cell System Components**

- One Normal Human Osteoblast Cell Product (Cryopreserved or Proliferating)
- One Normal Human Osteoblast Cell Medium BulletKit™ - 500 ml
  Clonetics™ OGM™ BulletKit™ (CC-3207) contains one 500 ml bottle of Osteoblast Basal Medium (OBM™) and OGM™ SingleQuots™ containing the following growth supplements: FBS, 50 ml; Ascorbic Acid, 0.5 ml; GA-1000, 0.5 ml.
- Differentiation SingleQuots™ (CC-4194)
  Hydrocortisone 21 Hemisuccinate (CC-4333), 0.5 ml (For alkaline phosphatase up-regulation and bone mineralization). β-Glycerophosphate (CC-4399), 5 ml (1.0 M solution - for bone mineralization)
- One ReagentPack™ (CC-5034) Containing:
  Trypsin/EDTA 100 ml
  Trypsin Neutralizing Solution 100 ml
  HEPES Buffered Saline Solution 100 ml

**Characterization of Cells**

Routine characterization of NHOst includes immunofluorescent staining. NHOst test positive for alkaline phosphatase and bone mineralization.

**Performance**

Recommended Seeding Density 5,000 cells/cm²
Typical time from subculture to confluent monolayer 5 - 9 days
Cumulative population doublings guaranteed using Clonetics™ System

**Quality Control**

All cells are performance assayed and test negative for HIV-1, mycoplasma, Hepatitis-B, Hepatitis-C, bacteria, yeast and fungi. Cell viability, morphology and proliferative capacity are measured after recovery from cryopreservation. Clonetics™ Media are optimized to grow specific types of normal human cells. Certificates of Analysis (COA) for each cell strain are shipped with each order. COA for all other products are available upon request.

**Ordering Information**

**Cryopreserved Cells**

CC-2538 NHOst ≥500,000 cells

**Proliferating Cells – Flasks and Multiwell Plates**

- CC-2538T25 T-25 Flask
- CC-2538T75 T-75 Flask
- CC-2538W96 96-well Plate

Other proliferating formats are available. Contact Scientific Support or refer to the Lonza website for details.
CC-3207  OGM™ BulletKit™,
OBM™ plus
SingleQuots™ of growth
supplements
500 ml

CC-3208  OBM™, Osteoblast Basal
Medium
500 ml

CC-4193  OGM™ SingleQuots™,
Formulates OBM™ to
OGM™

CC-4194  OGM™ Differentiation
SingleQuots™ induce
osteoblast differentiation
and mineralization

CC-5034  ReagentPack™
Trypsin/EDTA Solution 100 ml
Trypsin Neutralizing
Solution 100 ml
HEPES Buffered Saline
Solution 100 ml

When placing an order or for technical service,
please refer to the product numbers and
descriptions listed above. For a complete listing of
all Clonetics™ Products, refer to the Lonza website
or the current Lonza catalog. To obtain a catalog,
additional information or technical service you may
contact Lonza by web, e-mail, telephone, fax or mail.

Product Warranty
CULTURES HAVE A FINITE LIFESPAN IN VITRO.
Lonza guarantees the performance of its cells only if
Clonetics™ Media and Reagents are used
exclusively, and the recommend protocols are
followed. The performance of cells is not guaranteed
if any modifications are made to the complete Cell
System. Cryopreserved NHsOst are assured to be
viable and functional when thawed and maintained
properly.

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not
approved for human or veterinary use, for application to humans
or animals, or for use in clinical or in vitro procedures.

WARNING: CLONETICS™ AND POIETICS™ PRODUCTS
CONTAIN HUMAN SOURCE MATERIAL, TREAT AS
POTENTIALLY INFECTIOUS. Each donor is tested and found
non-reactive by an FDA approved method for the presence of
HIV-1, Hepatitis B Virus and Hepatitis C Virus. Where donor
testing is not possible, cell products are tested for the presence of
viral nucleic acid from HIV, Hepatitis B Virus, and Hepatitis C
Virus. Testing can not offer complete assurance that HIV-1,
Hepatitis B Virus, and Hepatitis C Virus are absent. All human
sourced products should be handled at the Biological Safety Level
2 to minimize exposure of potentially infectious products, as
recommended in the CDC-NIH Manual, Biosafety in
Microbiological and Biomedical Laboratories, 5th Edition. If you
require further information, please contact your site Safety Officer
or Scientific Support.