Sterile, Ready-to-Use Lymphocyte Separation Medium

Designed for isolating mononuclear cells (PBMCs) from human peripheral blood, bone marrow, and umbilical cord blood. Light-sensitive; store at room temperature (RT) protected from light. Shelf life: 2 years. After sterile opening, store at RT or 4°C.

Product Overview

This product is a sterile, ready-to-use lymphocyte separation medium with a precisely optimized density of 1.077 g/mL, specifically designed for high-purity isolation of mononuclear cells (PBMCs) from human peripheral blood, bone marrow, and umbilical cord blood. Utilizing gradient centrifugation, it enables efficient separation of lymphocytes from erythrocytes and granulocytes, suitable for immunology research, cell therapy development, and preclinical studies.

Quality Control

Batch Consistency: HPLC-verified polymer component peak area RSD ≤1.5%

Functional Validation: Each batch validated with healthy donor PBMC isolation efficiency tests (n=3)

Stability Data: Accelerated testing (25°C/60% RH) confirms 2-year shelf life

Features

High-Purity Isolation

PBMC purity ≥95% (flow cytometry-verified CD45⁺)

Erythrocyte residue ≤5%, granulocyte contamination ≤2%

Ready-to-Use Sterile Design

0.22 μm terminal filtration, endotoxin ≤0.1 EU/mL

No dilution or pretreatment required

Light-Sensitive Stabilized Formula

Contains antioxidants and light-protective stabilizers

Maintains performance stability for 30 days post-opening at RT/4°C

Broad Compatibility

Compatible with standard blood collection tubes (EDTA/heparin anticoagulated blood tubes)

Supports downstream applications:

Flow cytometry (surface marker analysis)

CAR-T/NK cell preparation

Virology infection modeling