

Datasheet for ABIN6941610
hPL Research Grade**2** Images[Go to Product page](#)

Overview

Quantity:	50 mL
Application:	Cell Culture (CC), Cell Culture Supplement (CCS)

Product Details

Purpose:	hPL Research Grade enables a simple switch to animal serum-free cell culture conditions.
Specificity:	hPL Research Grade supports the cell growth performance of Mesenchymal Stem Cells (MSC) compared to FBS without loss of phenotype. In vitro propagation and maintenance of non-primate cell lines needs to be tested and optimized on a case-by-case basis.
Characteristics:	<ul style="list-style-type: none">• hPL Research Grade is a forward-looking xeno-free cell culture supplement based on human Platelets. The product is formulated to offer a comparably growth-promoting, but xeno-free solution to Fetal Bovine Serum (FBS).• hPL Research Grade is derived from human platelets collected from healthy donors at EMA-licensed (European Medicines Agency) blood centers.• hPL Research Grade is manufactured from platelet units obtained from healthy blood donors who have been tested and found negative for Anti-HIV-1/2, Anti-HCV, Anti-HBc, HBs-Ag, HBV-NAT, HCV-NAT, HIV-1-NAT, Treponema pallidum and Syphilis.• hPL Research Grade provides consistent trial results without the need of batch testing. The cellular growth performance is comparable to FBS-supplemented cell cultures. Consequently, hPL Research Grade enables a simple switch to animal serum-free cell culture conditions.• Each batch of hPL Research Grade is produced from large pools of platelet units to minimize batch-to-batch variability.
Grade:	Research Grade
Material not included:	Anticoagulant, basal medium, L-glutamine, pen/strep

Application Details

Application Notes: Anticoagulant required (2 IU/mL)

The formulation of hPL Research Grade contains coagulation factors. To inhibit coagulation of the complete cell culture medium, it is recommended to add anticoagulants.

Please don't miss to add either our standard Anti-Coagulant (ABIN6720635) or our xeno-free synthetic Anti-Coagulant (Animal Component-free) (ABIN6720636) to your order.

Comment: Insoluble particles may form in thawed hPL Research Grade. Particulate formation does not affect cell culture performance.

If clotting or insoluble particles appear in complete cell culture medium, it is recommended to filter the complete medium using a 0.22 µm filter after hPL Research Grade is diluted in the basal medium. Filtering does not compromise the cell growth performance (as tested using MSC).

However, filtering is NOT recommended for 100% concentrate hPL Research Grade.

Avoiding multiple freeze-thaw cycles of thawed hPL Research Grade can minimize particulate formation.

Reagent Preparation:

1. Thaw hPL Research Grade, ideally, overnight at 4 °C or for 1 hour in a 37 °C water bath.
2. Prepare complete cell culture medium by adding 10 % hPL Research Grade to basal medium (i.e. MEM α, GlutaMAX™ Supplement, no nucleosides) and 1 % of pen/strep as final concentration.
3. Anticoagulant should be added to the complete cell culture medium to avoid coagulation. We recommend to add anticoagulant at a final concentration of 2 IU/mL "Anti-Coagulant" (ABIN6720635) or 0.024 mg/mL "Anti-Coagulant (Animal Component-free)" (ABIN6720636).
4. Complete cell culture medium can be stored at 4 °C and is stable for approximately eight weeks.

Restrictions: For Research Use only

Handling

Format: Liquid

Storage: -20 °C

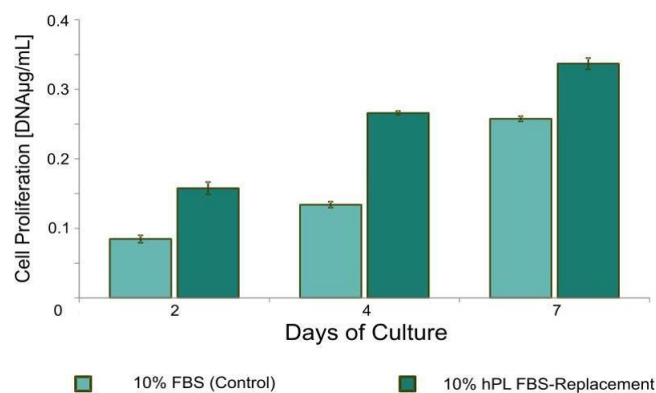
Storage Comment: hPL Research Grade is most stable when stored frozen at -20°C or below until use.

Upon thawing, it is recommended to aliquot and refreeze samples of unused product at -20°C.

Repeated freeze-thaw cycles should be avoided.



Image 1.



Proliferation Assay

Image 2. PicoGreen Cell proliferation assay of primary hMSC-AT. Cells were grown in media supplemented with either 10% FBS or 10% hPL Replacement. Fluorescence was measured (Ex=480 nm) and dsDNA was quantified after 2, 4 and 7 days. Light Green: 10 % FBS; dark green: 10 % hPL FBS-Replacement.