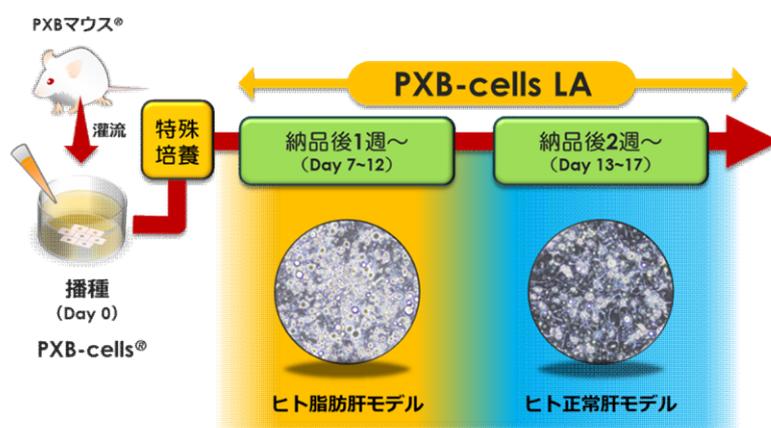


# Announce about contract test service using PXB-cells LA.

**New!**

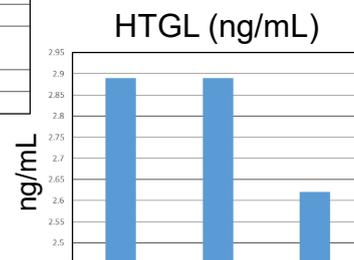
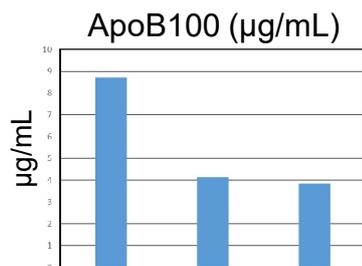
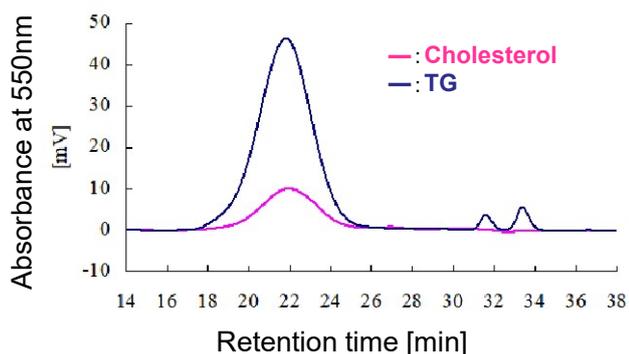
- For Research Use -

PXB-cells LA (manufactured by PhoenixBio Co., Ltd.) is a fresh human hepatocyte isolated from PXB mice (for lipid research). Using this, human fatty liver model and normal human liver model can be used for lipid metabolism research, drug screening, and in vitro research of functional substances. IBL will provide a contract test service using PXB-cells LA in Japan.



Quoted from site of PhoenixBio Co., Ltd.

Huge lipid droplets similar to cellular fatty liver cells were confirmed in the cells up to about 10 days after inoculation, and high levels of triglyceride accumulation were observed, which can be used as a human fatty liver model.



It has a high lipid metabolism function and shows the same lipid profile as human fresh hepatocytes in the culture supernatant.

ApoB100 and HTGL are detected in culture supernatant of PXB-cells LA.

**Click here for details about PXB-cells LA**

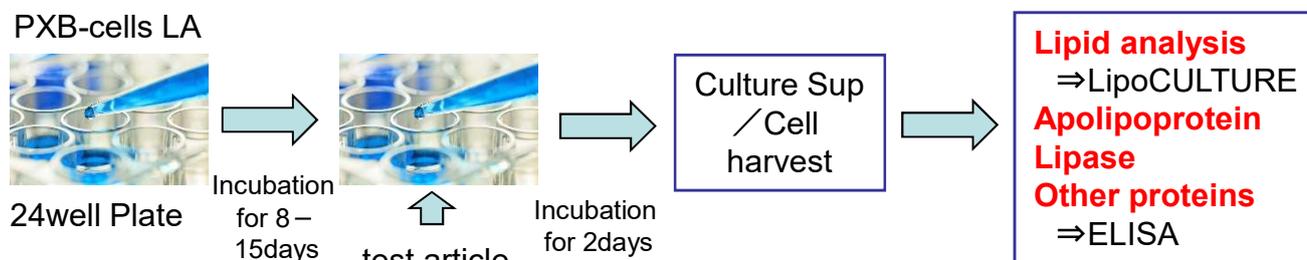
<https://www.phoenixbio.com/products/pxb-cells#MoreInfo>  
[PXB-cells] is a registered trademark of PhoenixBio Co., Ltd.



# Lipid Metabolism related services LipoCULTURE & ELISA

- For Research Use-

An image of a functional evaluation test of a test article the use PXB-cells LA.



**Customer provide test article to IBL, IBL do planning and conduct test and report results.**

## LipoCULTURE

LipoCULTURE is an analysis service for detailed analysis of lipoproteins and lipids in cell culture supernatants. It can be used for screening and functional evaluation of research target materials. Lipoproteins secreted into cell culture supernatants are separated by the same system as LipoSEARCH, and the concentrations of cholesterol and triglycerides in the major 4 fractions (CM, VLDL, LDL, HDL) and the detailed 20 fractions are measured and reported.

[Click here for details](#)

## ELISA

The quantification of various factors in the cell culture supernatant could be measured by using our products.

[Click here for details](#)

Code No.	Target	Specied	Sample amount	Sample	Storage	Price
76210	<a href="#">LipoCULTURE</a>	Human	300μL	Culture Sup	Frozen	inquiry
77015	<a href="#">Apo B100</a>	Human	100μL	Culture Sup	Frozen	inquiry
77014	<a href="#">ApoA5</a>	Human	100μL	Culture Sup	Frozen	inquiry
77010	<a href="#">HTGL</a>	Human	100μL	Culture Sup	Frozen	inquiry
77016	<a href="#">ANGPTL3</a>	Human	50μL	Culture Sup	Frozen	inquiry
77017	<a href="#">ANGPTL4</a>	Human	100μL	Culture Sup	Frozen	inquiry
77007	<a href="#">ANGPTL8</a>	Human	50μL	Culture Sup	Frozen	inquiry
77037	<a href="#">FGF21</a>	Human	500μL	Culture Sup	Frozen	inquiry

### 【References】

1. Lipoprotein profile and lipid metabolism of PXB-cells, human primary hepatocytes from liver-humanized mice: proposal of novel in vitro system for screening anti-lipidemic drugs. Hata, K. et al. *Biomed Res.* 2020;41(1):33-42.

Inruiry: Immuno-Biological Laboratories Co,Ltd.  
TEL: 0274-50-8666 E-mail: do-ibl@ibl-japan.co.jp





# An experimental case-1

## Measurement by LipoCULTURE of culture sup of PXB-cells LA

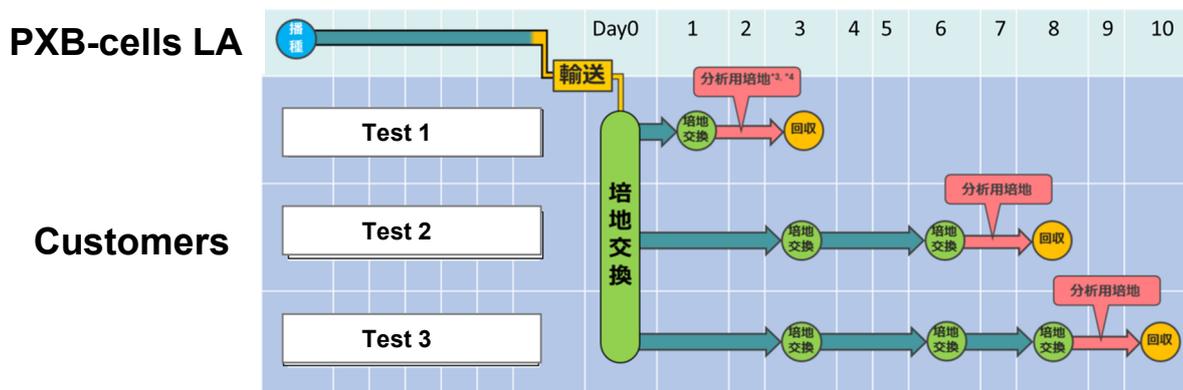
- For Research Use-

### Changes of Cholesterol/TG associated with incubation and addition of test articles by LipoCulture measurement.

Test1 : 1 day incubation → change media+test articles → 2 day incubation → harvest

Test2 : 6 day incubation → change media+test articles → 2 day incubation → harvest

Test3 : 8 day incubation → change media+test articles → 2 day incubation → harvest

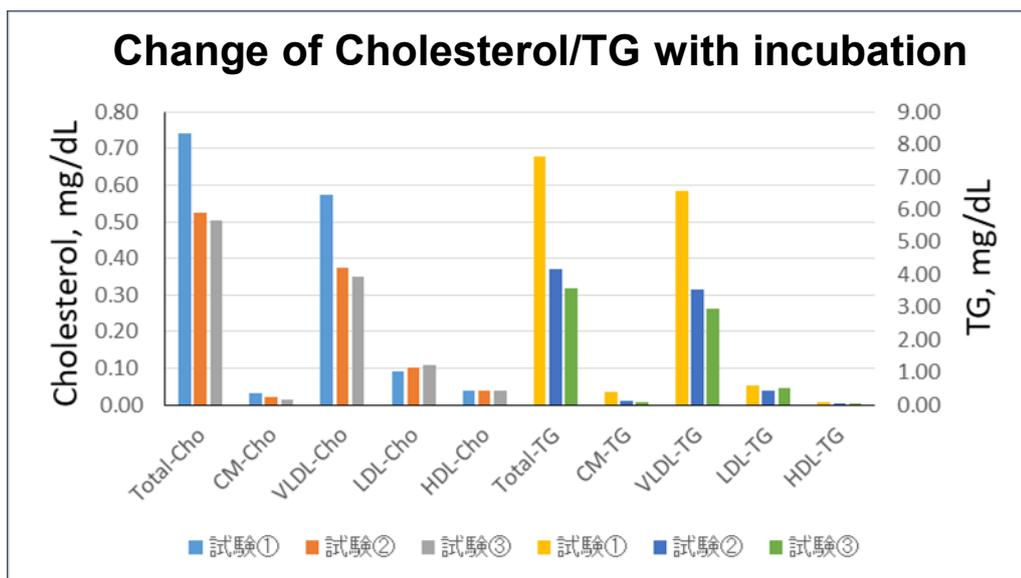


Medium for incubation : PXB-cells incubation medium ( No. : PPC-M100 )

Medium for test : William's E Medium no Phenol Red ( A1217601 : Thermo Fisher Scientific )  
with CM4000 : Thermo Fisher Scientific )

Test article : Lomitapide 0 , 1uM , 10uM 100uM / DMSO buffer

Lactoferrin 0 , 10ug/mL , 100ug/mL , 1000ug/mL / PBS



● The change of Cho/TG were measured by LipoCULTRE.  
The amount of Cho/TG in culture sup were decreased with incubation.



# An experimental case-1

## Measurement by LipoCULTURE of culture sup of PXB-cells LA

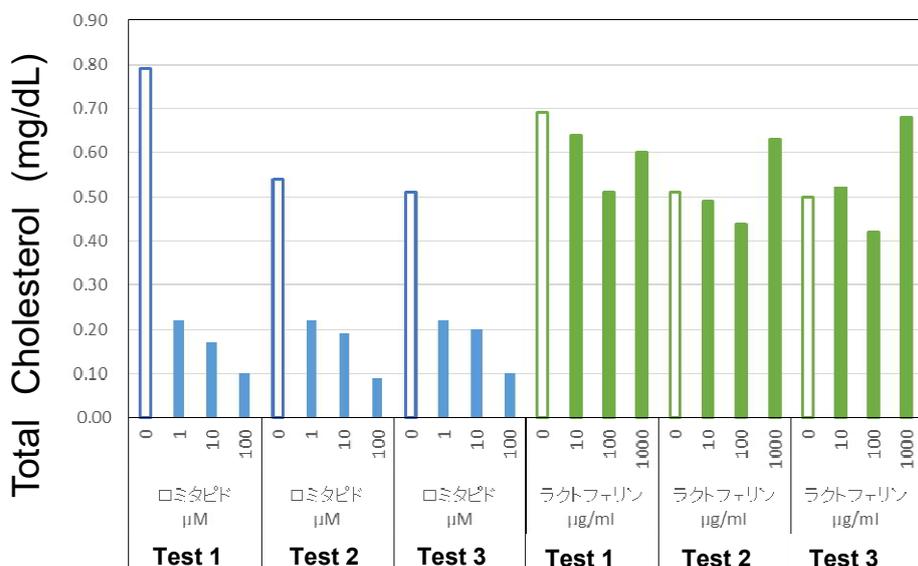
- For Research Use-

### Changes of Cholesterol/TG associated with incubation and addition of test articles by LipoCulture measurement.

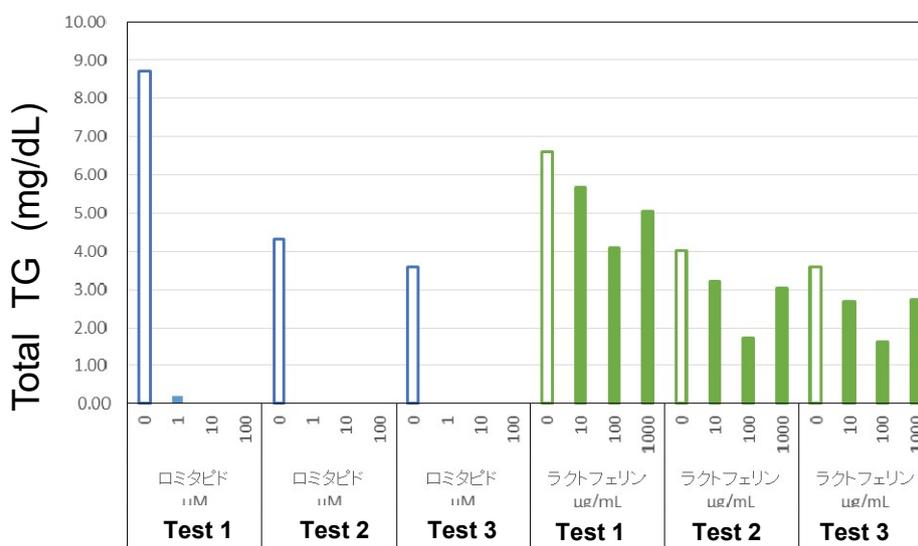
Test1 : 1 day incubation → change media+test articles → 2 day incubation → harvest

Test2 : 6 day incubation → change media+test articles → 2 day incubation → harvest

Test3 : 8 day incubation → change media+test articles → 2 day incubation → harvest



LipoCULTURE  
Cholesterol  
TG



Open bar  
: no test article  
Closed bar  
: test article added

**Lomitapide group**    **Lactferrin group**

- The amounts of Cho/TG were decreased with incubation period.
- The addition of Lomitapide decreased Cho/TG.
- The addition of Lactferrin decreased TG conc.

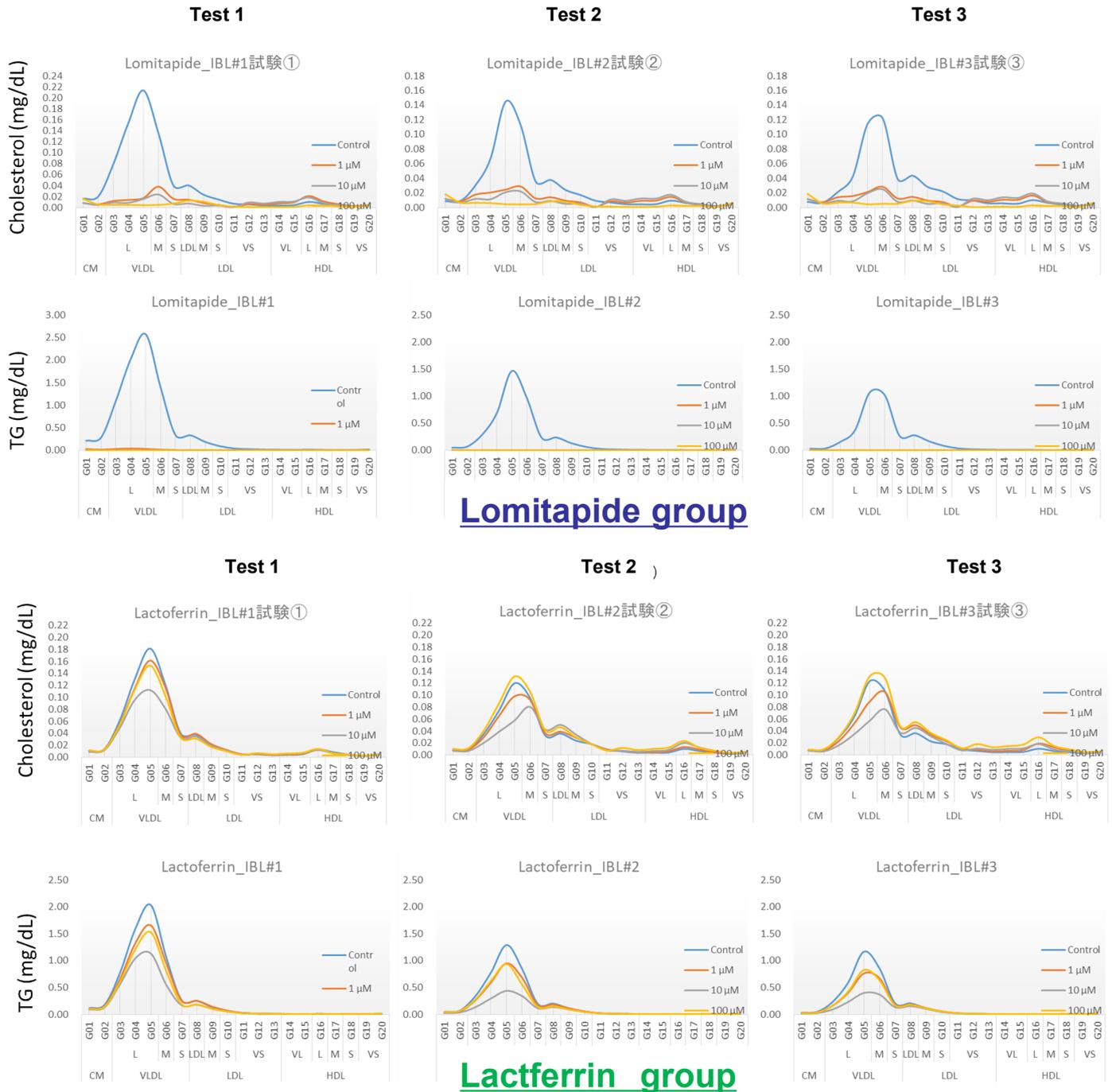
# An experimental case-2



## Detail analysis by LipoCULTURE of culture sup of PXB-cells LA

- For Research Use-

**Changes of Cholesterol/TG associated with incubation and addition of test articles by LipoCulture measurement.**  
**— The effects on detailed subclasses of lipoproteins —**



● The concentrations of Cho/TG were mainly decreased in VLDL.

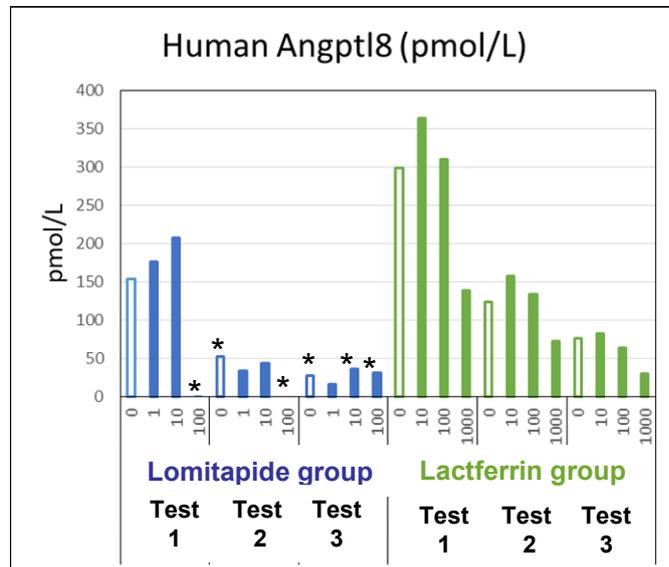
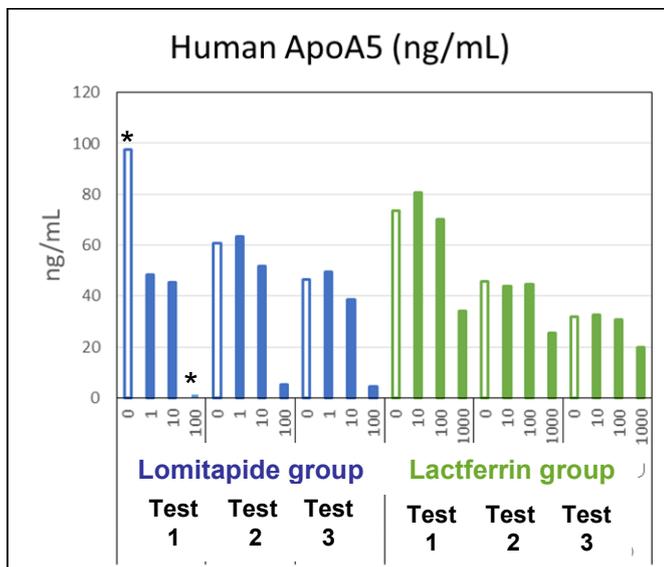
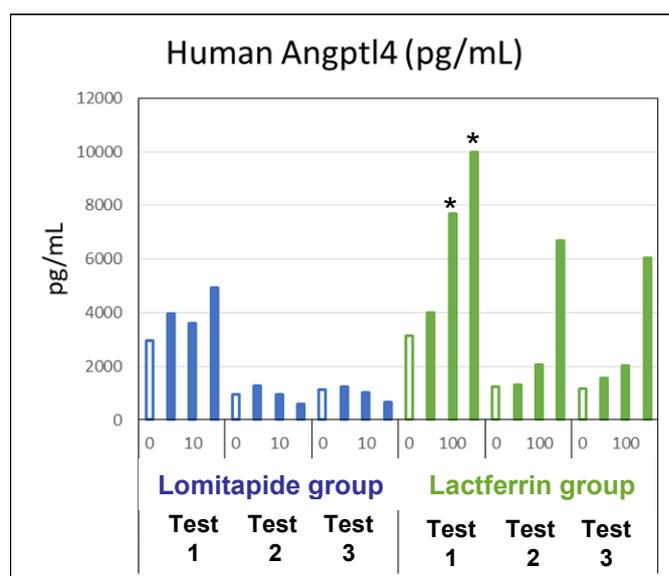
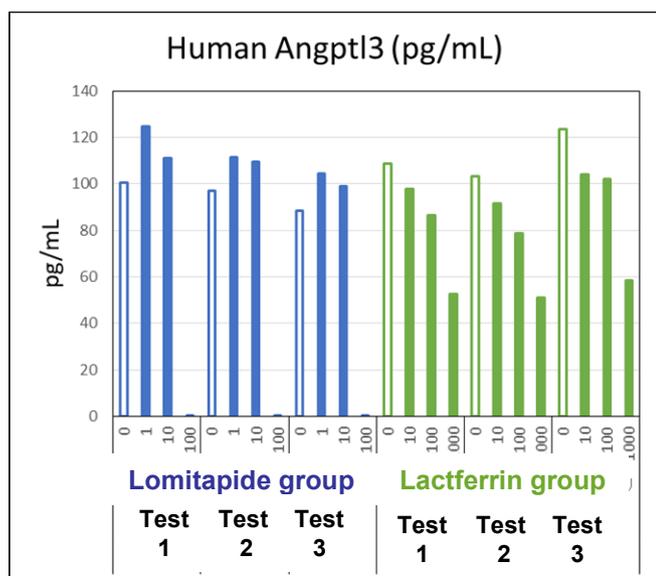


# An experimental case-3

## Measurement of various proteins in culture sup of PXB-cells LA

- For Research Use-

Changes of some factors associated with incubation and addition of test articles by ELISA measurement.



- Except Angptl3, their concentrations were decreased with incubation.
- The addition of Lomitapide decreased ApoA5.
- The addition of Lactferrin decreased Angptl3, Angptl8 and ApoA5 and increased Angptl4.

Open bar : no test article  
Closed bar : test article added

\* : Reference value treatment

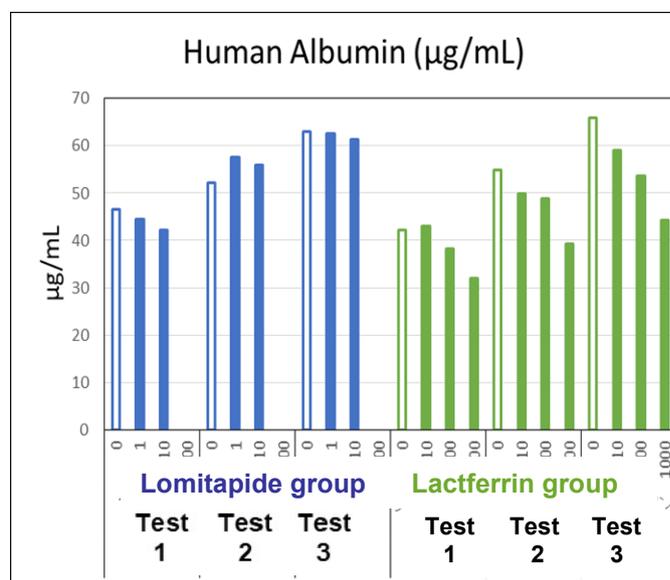
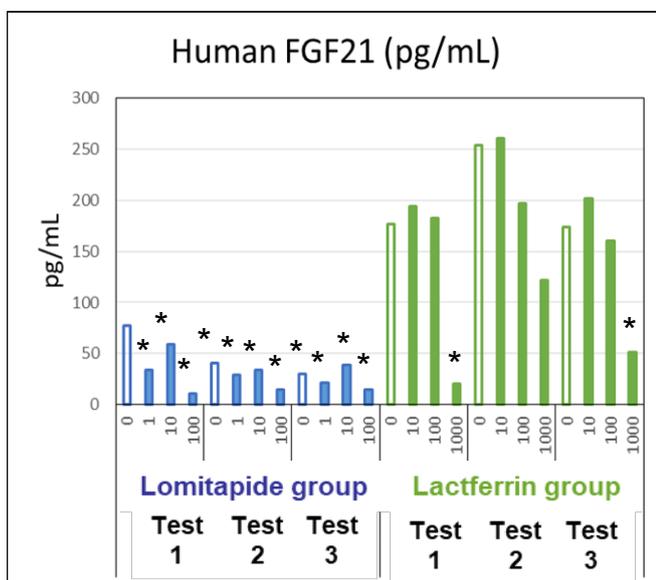
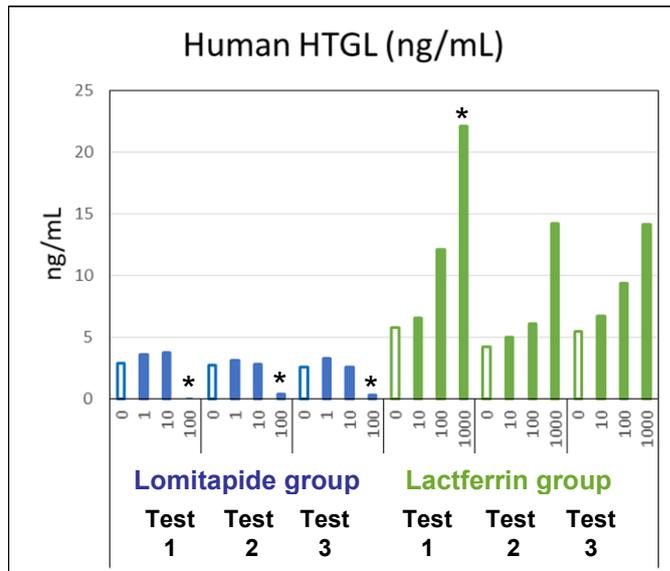
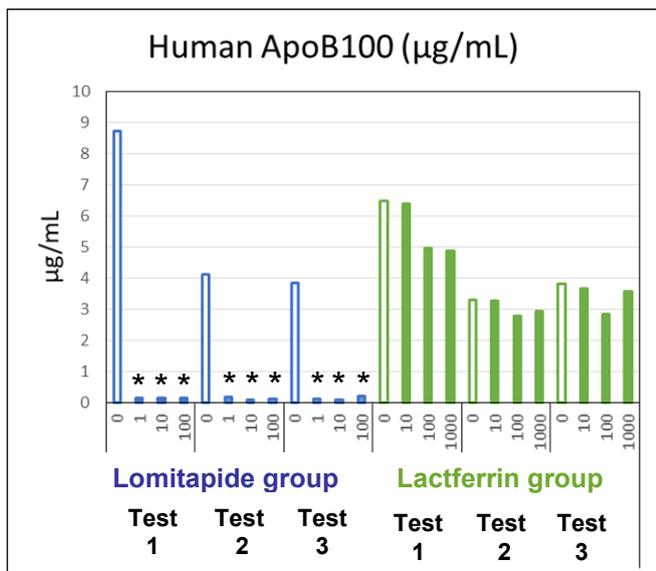


# An experimental case-3

## Measurement of various proteins in culture sup of PXB-cells LA

- For Research Use-

Changes of some factors associated with incubation and addition of test articles by ELISA measurement.



● ApoB100 was decrease with incubation, by contrast, Albumin was increased.

● The addition of Lactferrin decreased ApoB100, FGF21 and Albumin and increased HTGL.

Open bar

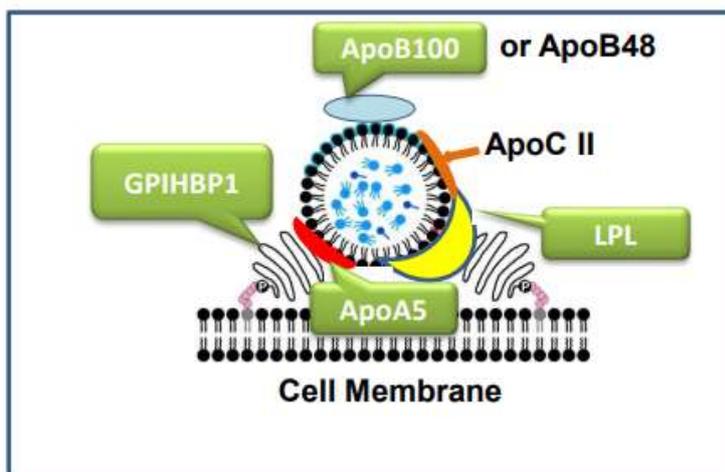
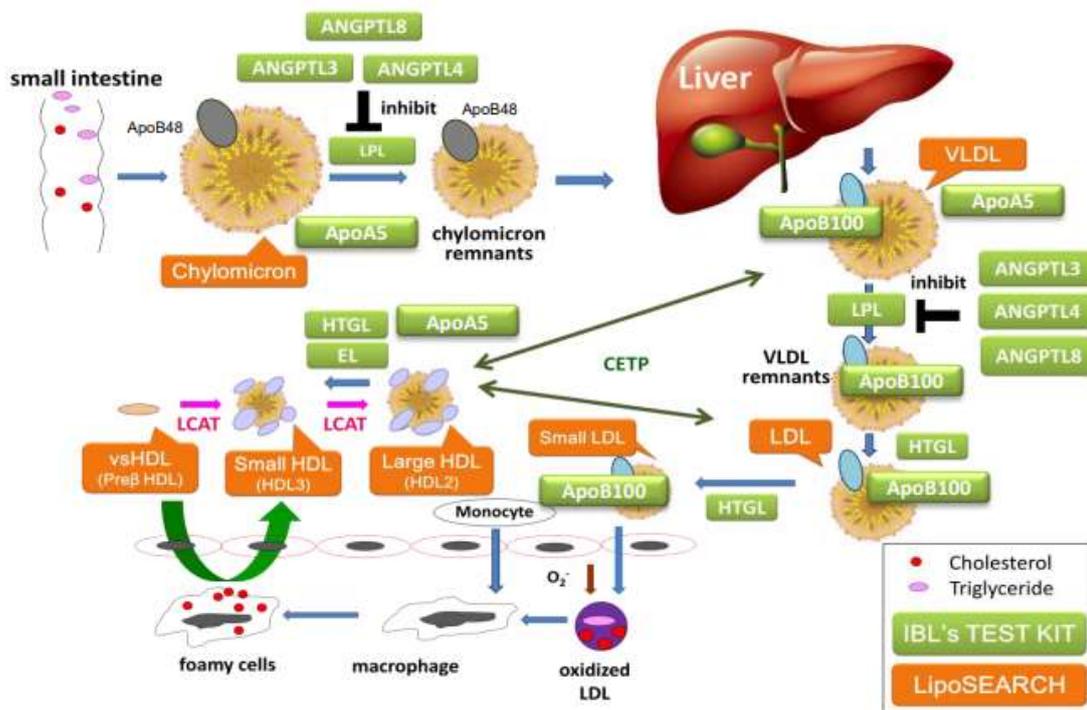
: no test article

Closed bar

: test article added

\* : Reference value treatment

## IBL Lipid Metabolism Map



IBL offer the detailed analysis service of cholesterol and triglyceride by LipoCULTURE and ELISA kits of lipid metabolism related factors. Please contact us casually.

Inruiry: Immuno-Biological Laboratories Co,Ltd.  
TEL: 0274-50-8666 E-mail: do-ibl@ibl-japan.co.jp

