

COMPANY PROFILE

IPHASE is a high-tech enterprise focusing on biomedical and life science research. Leveraging extensive knowledge and enduring passion for scientific research, our scientific team is dedicated to providing high-quality innovative biological reagents and technical services for scientists worldwide.

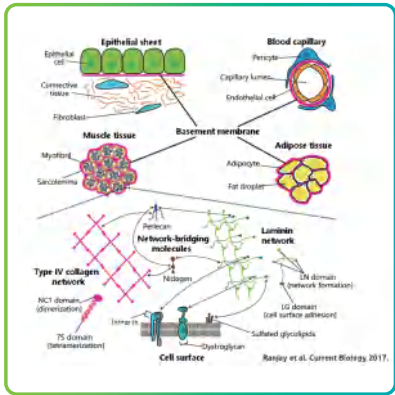
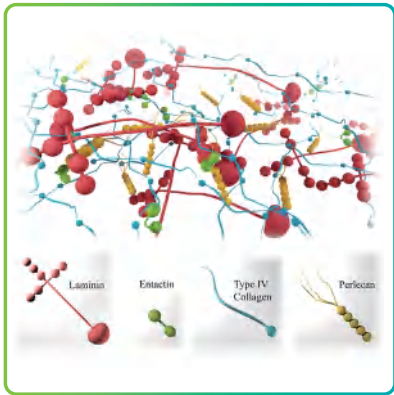
IPHASE commenced and launched its first ADMEs products for drug early screening. IPHASE has further expanded its product portfolio through robust investment and efforts in developing products for pharmacokinetics, pharmacology, microbiology, immunology, genetics, and clinical medicine based on years of successful experience in independent product research and development and after-sales support. Our products are validated by in-house or international standards (e.g. OECD and ICH) and have gained qualification/patent certificates and wide recognition from peers in the industry.

The core competencies of IPHASE lie in the company's extensive innovative capability and experience in chemical and biological analysis, cytogenetics, DNA engineering, protein and antibody development, and immunoassay. Our mission is to provide innovative reagents for innovative research!

Basalgel™

Basalgel™ is a natural basement membrane matrix extracted from mouse tumor cells rich in extracellular matrix proteins. Composed of laminin, type IV collagen, entactin, perlecan, and various cytokines. Widely used in organoid culture, in vitro angiogenesis, signal optimization of tubular bone cells, animal models, such as PDX, CDX, in vivo angiogenesis assays, etc.

- Standard Basalgel™ Matrix
- Low Factor Basalgel™ Matrix
- High Concentration Basalgel™ Matrix
- Basalgel™ Matrix Stem Cells Culture
- Basalgel™ Matrix Phenol Red-free
- Basalgel™ Matrix Antibiotic Free
- Basalgel™ Matrix Organoid Culture



Organoid Medium

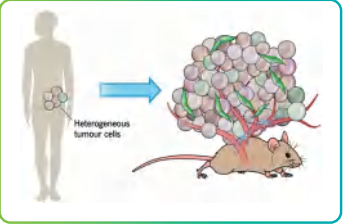
CANCER ORGANOID MEDIUM

- Colorectal Cancer Organoid Medium
- Lung Adenocarcinoma Organoid Medium
- Lung Squamous Cell Carcinoma Organoid Medium
- Small Cell Lung Cancer Organoid Medium
- Ovarian Cancer Organoid Medium
- Cervical Cancer Organoid Medium
- Endometrial Cancer Organoid Medium
- Gastric Cancer Organoid Medium
- Hepatocellular Carcinoma Organoid Medium
- Cholangiocarcinoma Organoid Medium
- Breast Cancer Organoid Medium
- Pancreatic Cancer Organoid Medium
- Head and Neck Squamous Cell Carcinoma Organoid Medium
- Esophageal Cancer Organoid Medium



NORMAL TISSUE ORGANOID CULTURE MEDIUM

- Human Colonic Organoid Medium
- Human Intestinal Organoid Medium
- Human Gastric Organoid Medium
- Human Airway Organoid Medium
- Mouse Airway Organoid Medium
- Mouse Intestinal Organoid Medium
- Mouse Colonic Organoid Medium
- Human Liver Ductal Organoid Medium
- Mouse Liver Ductal Organoid Medium

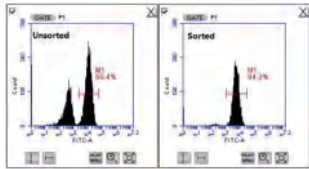
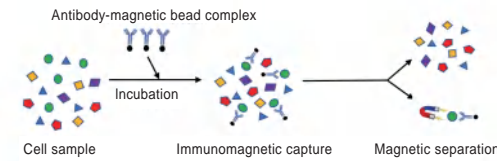


Cell isolation products

With the application of antibody and aptamer technology, IPHASE has developed two sorting systems: positive selection and aptamer traceless selection. Positive selection isolates the target cells directly from the mixed cell suspension. Aptamer traceless selection refers to obtaining target cells based on the technology of using aptamer conjugated magnetic bead to isolate the target cells, and then using elution buffer to dissociate the cells from the magnetic beads to obtain cells without any impact on the integrity of the cell.

CELL ISOLATION KIT

- Human/Mouse CD3+ T cell sorting kit (positive selection/aptamer traceless selection)
- Human/Mouse CD4+ T cell sorting kit (positive selection/aptamer traceless selection)
- Human/Mouse CD8+ T cell sorting kit (positive selection/aptamer traceless selection)
- Human/Mouse CD14+ cell sorting kit (positive selection/aptamer traceless selection)
- Human/Mouse CD19+ B cell sorting kit (positive selection/aptamer traceless selection)
- Human/Mouse NK cell sorting kit (positive selection/aptamer traceless selection)
- Mononuclear cell separation kit (human, monkey, dog, rat, mouse, pig, and rabbit)



CELL ISOLATION REAGENTS

- Streptavidin magnetic beads (1 µm, 2.8 µm)
- Carboxyl magnetic beads (1 µm, 2.8 µm)
- Biotinylated antibodies (CD3, CD4, and CD8)
- Antibodies for flow cytometry (FITC-, PE- and APC-labeled anti-CD antibodies)

Cells and cell lines

PERIPHERAL BLOOD MONONUCLEAR CELLS

The main cell types in the blood are peripheral blood mononuclear cells (PBMCs), including lymphocytes (T/B), monocytes, phagocytes, dendritic cells, and some other types of cells. In particular, lymphocytes account for a large percentage of PBMCs in the blood. PBMCs can be used for mixed lymphocyte reaction assay (MLR), staphylococcal enterotoxin B stimulation assay (SEB), antibody-dependent cellular cytotoxicity assay (ADCC), T cell activation or inhibition assay, and Treg inhibition assay.

- Peripheral blood mononuclear cells (PBMC) (human, monkey, dog, rat, mouse, rabbit, and cat)
- Human cord blood mononuclear cells (CBMC)
- Spleen mononuclear cells (monkey, dog, rat, and mouse)
- Bone marrow mononuclear cells (monkey, dog, rat, and mouse)
- Peripheral blood CD3+ T lymphocytes (human and mouse)
- Peripheral blood CD4+ T lymphocytes (human and mouse)
- Peripheral blood CD8+ T lymphocytes (human and mouse)
- Peripheral blood CD19+ B lymphocytes (human and mouse)
- Peripheral blood NK cells (human and mouse)
- Peripheral blood CD14+ cells (human and mouse)



★IPHASE Biosciences can provide customized PBMC products from specific species and tissues.

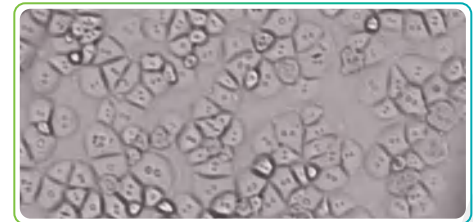
PRIMARY HEPATOCYTES

Primary hepatocytes have great advantages in *In vitro* pharmaceutical research because they contain the same level of cytochrome P450 as that *in vivo* and essentially maintain the *in vivo* metabolic functions of the liver. They are highly suitable for both mechanism studies and hepatotoxicity studies. Primary hepatocytes are applicable to drug metabolism studies, CYP enzyme inhibition and induction studies, and transporter studies.

- Suspension Hepatocytes (human, monkey, beagle dog, rat, and mouse)



- Plateable Hepatocytes (human, monkey, beagle dog, rat, and mouse)



ADME products

IN VITRO METABOLISM TEST KIT

- Phase I metabolic stability test kit (human, monkey, dog, rat, and mouse)
- Phase II metabolic stability test kit (UGTs) (human, monkey, dog, rat, and mouse)
- Phase II metabolic stability test kit (PAPS) (human, monkey, dog, rat, and mouse)
- CYP450 enzyme metabolism phenotyping kit (chemical inhibition method-human, monkey, dog, rat, and mouse)
- CYP450 enzyme metabolism phenotyping kit (recombinase method)
- Enzyme inhibition (IC50) test kit (specific substrates-human, monkey, dog, rat, and mouse)
- Enzyme inhibition (IC50) test kit (recombinase-monoenzyme)

IN VITRO METABOLISM REAGENTS

- NADPH regeneration system
- UGT incubation system
- PAPS incubation system
- CYP450 enzyme probes and substrates/ metabolites/specific inhibitors



IN VITRO METABOLISM TEST SYSTEMS

- Liver microsomes (human, monkey, dog, rat, mouse, cat, pig, and rabbit)
- Liver S9 (human, monkey, dog, rat, mouse, and pig)
- Liver cytosol (human, monkey, dog, rat, and mouse)
- Intestinal microsomes (human, monkey, dog, rat, and mouse)
- Intestinal S9 (human, monkey, dog, rat, and mouse)
- Intestinal cytosol (human, monkey, dog, rat, and mouse)
- Kidney microsomes (human, monkey, dog, rat, and mouse)
- Kidney S9 (human, monkey, dog, rat, and mouse)
- Kidney cytosol (human, monkey, dog, rat, and mouse)
- Transporter cells or transporter vesicles
- Primary hepatocytes (human, monkey, dog, rat, and mouse)
- Recombinant CYP450 enzymes/Cytochrome P450 enzymes
- Recombinant UGTase
- 0.1 M PBS buffer
- Tris-HCl buffer



★IPHASE Biosciences offers customized products from specific species and tissues.

IN VITRO METABOLISM STANDARDS

CYP ENZYMES	SUBSTRATES	PRODUCTS	INHIBITORS
CYP1A2	Phenacetin/7-Ethoxyresorufin	Acetaminophen/Resorufin	α -Naphthoflavone, Furafylline*
CYP2B6	Bupropion	Hydroxybupropion	Sertraline, Ticlopidine*
CYP2C8	Paclitaxel/Amodiaquine	6-Hydroxy paclitaxel/N-desethyl amodiaquine	Montelukast, Phenelzine*
CYP2C9	Diclofenac	4-Hydroxydiclofenac	Sulfaphenazolum, Tienilic acid*
CYP2C19	S-Mephenytoin	4-Hydroxymephenytoin	Nootkatone, Ticlopidine*
CYP2D6	Dextromethorphan	Dextrorphan (desmethyl dextromethorphan)	Quinidine, Paroxetine*
CYP3A4/5**	Midazolam/Testosterone	1-Hydroxymidazolam/6 β -Hydroxytestosterone	Ketoconazole, Azamulin*
CYP2A6	Coumarin	7-hydroxycoumarin	Pilocarpine
CYP2E1	Chlorzoxazone	6-Hydroxychlorzoxazone	Sodium diethyldithiocarbamate

Note: *indicates time-dependent inhibitors, which should be pre-incubated with the test system;
**For CYP3A4/5, enzyme inhibition studies should be performed using two substrates.

PLASMA PROTEIN BINDING ASSAY PRODUCTS

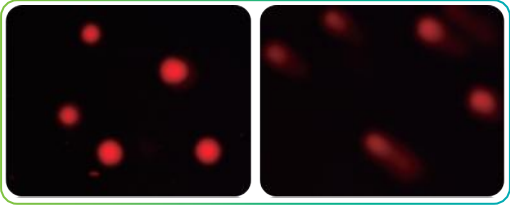
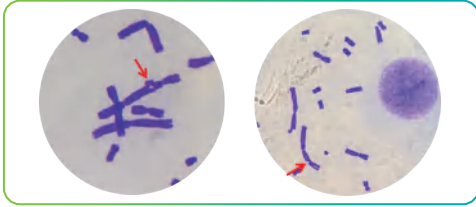
- Balanced dialysis device for plasma protein binding assay
- Plasma protein binding test kit (human, monkey, dog, rat, and mouse)
- Dialysis membrane (12-14KD, 25KD, 50KD)
- Special plasma for plasma protein binding assay (human, monkey, dog, rat, and mouse)



PRODUCTS FOR PLASMA STABILITY ASSAY

- Special plasma for plasma stability testing (human, monkey, dog, rat, and mouse)

- Ames strain identification kit
- TK gene mutation test kit
- HGPRT gene mutation test kit
- In vitro* chromosome aberration test kit



- In vitro* micronucleus test kit
- Comet assay kit

- Rat liver S9 activation system
- Giemsa's staining kit



ACCESSORY PRODUCTS FOR GENOTOXICITY TEST

- Mouse lymphoma cell line L5178Y TK+/- clone (3.7.2C)
- Chinese hamster lung cell line V79
- Chinese hamster lung cell line CHL
- Giemsa's staining solution
- Induced mixed liver S9 of SD rat
- D-Glucose 6-phosphate disodium
- Coenzyme II

Blank matrices

BLANK BIOLOGICAL MATRIX

- Whole blood, serum, plasma, cerebrospinal fluid, breast milk, urine, bile, gastric juice, feces, liver tissue, brain tissue, kidney tissue, lung tissue, ovarian tissue, corneal tissue, aqueous humor, vitreous humor, and tissue homogenate.
- Methodology validation kits are available for all of the above products.



ARTIFICIAL MATRICES

Artificial plasma, artificial urine, artificial saliva, artificial sweat, artificial gastric juice, artificial small intestinal juice, artificial colonic fluid, and artificial pig gastric juice

SOURCES OF MATRIX

Cynomolgus monkey, rhesus monkey, beagle dog, SD rat, Wistar rat, Wistar Han rat, ICR (CD-1) mouse, C57 mouse, BALB/c mouse, golden hamster, guinea pig, minipig, rabbit, cat, cow, and sheep.



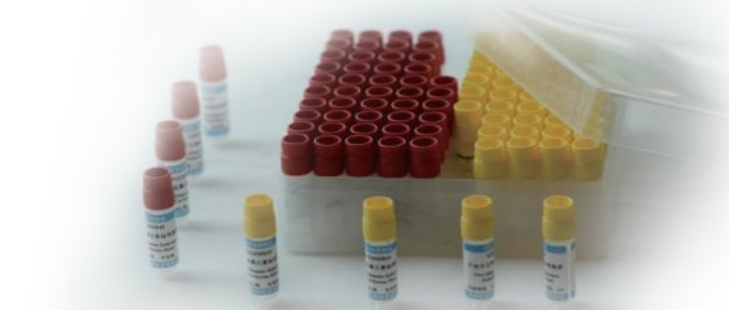
Standard substances and QC materials

STANDARD SUBSTANCES

- Reference standards (coordination complex) of lead in bovine blood
- Reference standards of five metal elements in bovine blood
- Reference standards of heavy metal elements (lead, cadmium and chromium) in cosmetic products
- Reference standards of 25-hydroxyvitamin D3 and 25-hydroxyvitamin D2 in human serum

QC MATERIALS

- QC materials for lead detection in human urine
- QC materials for arsenic detection in human urine
- QC materials for mercury detection in human urine
- QC materials for lead detection in bovine blood



★IPHASE Biosciences provides customized QC materials.

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IPHASE



IPHASE
PRODUCT
BROCHURE

- PROVIDING SCREENING TOOLS FOR EARLY DRUG DISCOVERY
- PROVIDING NEW MATERIALS, METHODS AND APPROACHES FOR LIFE SCIENCE RESEARCH
- PROVIDING CONVENIENT PRODUCTS FOR *IN VITRO* STUDIES OF FOOD, DRUGS AND CHEMICALS

ANY PUBLICATIONS IN GLOBAL JOURNALS THAT SPECIFIED THE USE OF IPHASE PRODUCTS CAN APPLY FOR A PRIZE WITHIN 1 YEAR FROM THE DATE OF PUBLICATION.

IPHASE

Products for genotoxicity assay

GENOTOXICITY TEST KIT

- Ames test kit (TA97a, TA98, TA100, WP2uvrA PKM101, TA1535)
- Micro-titer Fluctuation Ames Test Kit
- Ames pre-test kit (TA97a/TA100 or TA98/TA100)

