# GMEP® Product Catalog





#### Introduction

We have consistently pursued chemically defined serum-free cell culture for mammalian cells since 1999. And our GMEP succeeded in the development of chemically defined medium of Human Embryonic Kidney 293 cells for the first time in the Japanese private sector.

With its three pillars consisting of the culture medium and the transfection reagent business, which encompasses GMEP's cell technologies for mammalian cells, and the custom service businesses which apply this basic technology, GMEP contributes to the bio industry in Japan and overseas.

#### **Research & Development**

- Chemically defined medium and Feed medium for mammalian cells.
- Transfection reagent and Enhancer reagent for mammalian cells.
- Manufacturing service of custom medium, buffer solution, and additives for mammalian cells or insect cells. Contract service of customer's cell culture.



#### More Flexible & Simple

It is not with just technologies so far. Creation of chemically defined media and reagents that reflect the cell's as it is.

#### **Enrich Its Creativity More**

Gently staring at the environment that is refined the function of mammalian cells, to create the chemically defined culture.



### **Product Information**

For safe and high quality products, we ensure thorough quality from development to manufacturing under traceability management.

(1) We use ultra pure water of high purity by a number of processes (activated carbon / ion exchange / distillation / UV / ultra pure water ion exchange / ultrafilter). It is with a resistivity value of 18.0 M $\Omega$  · cm or more and a TOC of 5 ppb or less.

(2) As products, we use pharmaceutical grade, special grade, pyrogen free, and mycoplasma free. The filling environment is sterilized under the working environment of the world's highest ULPA filter (ISO class 3 cleanliness). The dust collection efficiency (99.999%) of the ULPA filter is superior to the dust collection efficiency (99.99%) of the HEPA filter with great cleanliness.

(3) Quality tests are cell culture test, endotoxin test, pH test, osmotic test, bacteria / fungus test, and mycoplasma test etc.



In the field of basic to medicinal research, we have offered a wide range of product lineups so that customers can select products and services suitable for various uses in serum-free culture of mammalian cells.

### Table of Contents

Introduction	2
Product information	3
Product lineup	6

### Transfection Kit (Recombinant Protein Production)

293 cells		
Gxpress 293 Tran	sfection & Medium Kit	8
Gxpress 293 Tran	sfection Kit	9
Gxpress 293 TF R	eagent	9
Gxpress 293 Enha	Incer	9
CHO cells		
Gxpress CHO Tra	nsfection & Medium Kit	10
Gxpress CHO Tra	nsfection Kit	11
Gxpress CHO TF	Reagent	11
Gxpress CHO Enh	nancer	11

# Chemically Defined Medium | 293 cells

Adherent culture	
HE100 medium	12
Single cell cloning assay	
HE150 medium	13
Suspension culture	
Suspension culture   Product lineup	14
HE400/HE400AZ medium	15
HE200 medium	16
HE300/HE300AZ medium	17
Fed-batch culture	
Gxpress 293 Feed medium	18

### Chemically Defined Medium | CHO cells

Adherent culture	
CH100 medium	19
Single cell cloning assay	
CH150 medium	20
Suspension culture	
Suspension culture   Product lineup	21
CH400/CH400AZ medium	22
CH200 medium	23
CH300/CH300AZ medium	24
Fed-batch culture	
Gxpress CHO Feed medium	25
Anti-Clumping reagent	
Scattering reagent CHO	25

# Chemically Defined Medium | Other cells

Normal Human Fibroblast	
FI200 medium	26
Hybridoma & Myeloma	
HY350 medium	26
HY300 medium	26
HY200 medium	26

### **Custom Service**

Manufacturing Services of Basal & CD Medium	27
R&D Services of Customized CD Medium	27
Contract Services of Cell Culture	27

# 293 cells | Product Lineup

**GMEP**<sup>®</sup> Cell technologies



#### CHO cells | Product Lineup







Gxpress 293 Transfection & Medium Kit has been developed for the gene expression system of human embryonic kidney (HEK) 293 cells, such as Expi293F or 293T cells, and the high production of recombinant proteins or the transfection assay in serum-free culture. All contents are a chemically defined composition that no contains serum, protein, animal origin, hydrolysates, and no unknown composition.



Catalog No. GX293-MAK-0010 ¥72,900 for 1 L assay

<Package Contents>

- Gxpress 293 TF Reagent 1.4 mL x 2
- 293 Complexing Solution 50 mL x 2
- Gxpress 293 Enhancer 60 mL x 1
- HE400AZ medium 1 L x 1



Cell technologies

\* Target 293 cells such as Expi293F or 293T cells.

- \*293 Complexing Solution is a CD medium that can increase the transfection efficiency.
- \* Gxpress 293 Enhancer is an enhancer reagent that can increase the recombinant protein production.

1) Growth assay of 293 cells in shaker culture.







Culture days



# Gxpress 293 Transfection Kit



Catalog No. GX293-RK-0010  $\,^{\,\,\mathrm{Y}}$  53,500 for 1 L assay

- <Package Contents>

  Gxpress 293 TF Reagent
  - Gxpress 293 TF Reagent 1.4 mL x 2
    293 Complexing Solution 50 mL x 2

  - Gxpress 293 Enhancer 60 mL x 1

# Gxpress 293 TF Reagent



Catalog No. GX293-TF-0010 ¥ 42,900

Gxpress 293 Enhancer



Catalog No. GX293-EN-0010 ¥ 16,500

Product Name	Catalog Number	Size	Price (JPY)
Gxpress 293 Transfection & Medium Kit <sup>**</sup> 1	GX293-MAK-0010	1 L assay	¥ 72,900
	GX293-MAK-0100	10 L assay	¥ 620,000
	GX293-MAK-0500	50 L assay	¥ 2,630,000
Gxpress 293 Transfection & Medium Kit II <sup>%</sup> 2	GX293-MK-0010	1 L assay	<sup>¥</sup> 71,100
	GX293-MK-0100	10 L assay	<sup>¥</sup> 605,000
	GX293-MK-0500	50 L assay	<sup>¥</sup> 2,560,000
Gxpress 293 Transfection Kit	GX293-RK-0010	1 L assay	<sup>¥</sup> 53,500
	GX293-RK-0100	10 L assay	<sup>¥</sup> 455,000
	GX293-RK-0500	50 L assay	<sup>¥</sup> 1,930,000
Gxpress 293 TF Reagent	GX293-TF-0010	2.8 mL	<sup>¥</sup> 42,900
	GX293-TF-0100	28 mL	<sup>¥</sup> 365,000
	GX293-TF-0500	140 mL	<sup>¥</sup> 1,550,000
Gxpress 293 Enhancer	GX293-EN-0010	60 mL	¥ 16,500
	GX293-EN-0100	600 mL	¥ 141,000
	GX293-EN-0500	3,000 mL	¥ 594,000

\*1 It is a ready-to-use product including HE400AZ medium (with Ala-Gln) to which L-alanyl-L-glutamine is added as a product component.

\*2 It is a product including HE400 medium (w/o Ala-Gln or Gln) that can control glutamine concentration during culture.

# **Gxpress CHO Transfection & Medium Kit**

Gxpress CHO Transfection & Medium Kit has been developed for the gene expression system of CHO cells, such as CHO-S or CHO-K1 cells, and the high production of recombinant proteins or the transfection assay in serum-free culture. All contents are a chemically defined composition that no contains serum, protein, animal origin, hydrolysates, and no unknown composition.





Cell technologies

Catalog No. GXCHO-MAK-0010 ¥72,900 for 1 L assay

<Package Contents>

20

15

10

5

0

Cell numbers (x 10<sup>6</sup> cells/mL)

CHO-S cells

Seeding density: 2 x 10<sup>5</sup> cells/mL

Shaker culture:

125 rpm, 37°C, 8% CO2

2

- Gxpress CHO TF Reagent 1.2 mL x 2
- CHO Complexing Solution 40 mL x 2
- Gxpress CHO Enhancer 120 mL x 1
- CH400AZ medium 1Lx1
- \* Target CHO cells such as CHO-S or CHO-K1 cells. \*CHO Complexing Solution is a CD medium that can increase the transfection efficiency.
- \*Gxpress CHO Enhancer is an enhancer reagent that can increase the recombinant protein production.
- 1) Growth assay of CHO cells in shaker culture.



2) Short-term production of human IgG.

200 Relative Expression of Human IgG (%) 356.3

400

Seeding density:

2 x 10<sup>6</sup> cells/mL

Shaker culture:

300

125 rpm, 37°C, 8% CO2



# **Gxpress CHO Transfection Kit**



Catalog No. GXCHO-RK-0010  $\ ^{\rm X}$  53,500  $\$  for 1 L assay

<Package Contents>

- Gxpress CHO TF Reagent 1.4 mL x 2
- CHO Complexing Solution 50 mL x 2
- Gxpress CHO Enhancer 120 mL x 1

# Gxpress CHO TF Reagent



Catalog No. GXCHO-TF-0010 ¥ 42,900

# Gxpress CHO Enhancer



Catalog No. GXCHO-EN-0010 ¥ 16,500

Product Name	Catalog Number	Size	Price (JPY)
	GXCHO-MAK-0010	1 L assay	¥ 72,900
Gxpress CHO Transfection & Medium Kit $^{st 1}$	GXCHO-MAK-0100	10 L assay	<sup>¥</sup> 620,000
	GXCHO-MAK-0500	50 L assay	¥ 2,630,000
	GXCHO-MK-0010	1 L assay	¥ 71,100
Gxpress CHO Transfection & Medium Kit II $^{st}2$	GXCHO-MK-0100	10 L assay	<sup>¥</sup> 605,000
	GXCHO-MK-0500	50 L assay	¥ 2,560,000
	GXCHO-RK-0010	1 L assay	<sup>¥</sup> 53,500
Gxpress CHO Transfection Kit	GXCHO-RK-0100	10 L assay	<sup>¥</sup> 455,000
	GXCHO-RK-0500	50 L assay	¥ 1,930,000
	GXCHO-TF-0010	2.4 mL	<sup>¥</sup> 42,900
Gxpress CHO TF Reagent	GXCHO-TF-0100	24 mL	<sup>¥</sup> 365,000
	GXCHO-TF-0500	120 mL	¥ 1,550,000
	GXCHO-EN-0010	120 mL	<sup>¥</sup> 16,500
Gxpress CHO Enhancer	GXCHO-EN-0100	1,200 mL	¥ 141,000
	GXCHO-EN-0500	6,000 mL	<sup>¥</sup> 594,000

\*1 It is a ready-to-use product including CH400AZ medium (with Ala-Gln) to which L-alanyl-L-glutamine is added as a product component.

\*2 It is a product including CH400 medium (w/o Ala-Gln or Gln) that can control glutamine concentration during culture.



GMEP® chemically defined medium has been developed for serum-free culture of 293 cells, such as Expi293F, 293-F, 293T, or HEK293 cells, and the high production of recombinant proteins or the transfection assay. All contents are a chemically defined composition that no contains serum, protein, animal origin, hydrolysates, and no unknown composition.



# Adherent culture HE100 medium

Figure) Growth assay of 293T cells or HEK293 cells on adherent culture.



HE100 medium is a chemically defined medium optimized for the adherent growth of 293 cells, such as Expi293F, 293-F, 293T, and HEK293 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

	Product Name	Glutamine	Catalog Number	Size	Price (JPY)
HE100 medium		HE100-0005	500 mL	¥ 11,600	
	_	HE100-0010	1000 mL	<sup>¥</sup> 16,500	
		HE100-0060	1000 mL x 6	¥ 89,000	
		HE100 powder	5L, 10L, 50L, etc.	Contact us	



# Single cell cloning assay HE150 medium

HE150 medium is a chemically defined medium / serum-free medium optimized for the single-cell growth of 293 cells, such as Expi293F, 293-F, 293T, and HEK293 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.



#### Figure) Growth assay of Expi293F cells cloned by HE150 medium.

Product Name	Glutamine	Catalog Number	Size	Price (JPY)
HE150 medium	_	HE150-0005	500 mL	<sup>¥</sup> 11,600



GMEP® chemically defined medium for suspension culture of human 293 cells (Expi293F, 293-F, 293T, HEK293, etc.) can be used for recombinant protein and virus production. GMEP® have a lineup with different nutrition ratios and prices.

#### Suspension | Product Lineup



Classification	Serum	Animal Origin	Protein	Endotoxin	Mycoplasma	Antibiotics	Phenol Red
Chemically Defined	Free	Free	Free	< 0.25 EU/mL * Colorimetry	Negative * Real-time PCR	No	No

The line up of three grades. You can select the optimal medium according to the test scenes using 293 cells.

Chemically defined medium	HE200	HE300/AZ medium		HE400/AZ medium	
(293 cells)	medium	HE300	HE300AZ	HE400	HE400AZ
L-Glutamine	-	-	-	—	_
L-Alanyl-L-glutamine	-	-	•	_	•
Nutrition ratio (composition)	1.0	1.1		1.6	
Final cell density (cells/mL) *1	3.0-6.0 × 10 <sup>6</sup>	4.0-7.0 x 10 <sup>6</sup>		$7.0-10.0 \times 10^{6}$	
Transfection assay *2	•	•			
Adaptation culture *3	•	•			
Subculture (>100 days)	•	•			
Fed-batch culture *4	•	•			
Price (1000 mL)	<sup>¥</sup> 9,800	<sup>¥</sup> 12,900	<sup>¥</sup> 12,900 <sup>¥</sup> 13,900		<sup>¥</sup> 21,600

\*1 Growth assay of Expi293F, 293T, 293-F, and HEK293 cells.

\*2 Transfection assay with Gxpress 293 Transfection kit using Expi293F, 293T, 293-F, and HEK293 cells.

\*3 Adaptation culture of Expi293F, 293T, 293-F, and HEK293 cells.

\*4 Fed-batch culture with Gxpress 293 Feed medium using Expi293F, 293T, 293-F, and HEK293 cells.



# Suspension culture HE400/HE400AZ medium



② Growth assay of 293 cells subcultured with each medium







Fig. 2) Expi293F cells subcultured with HE400AZ medium.

Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		HE400-0005	500 mL	¥ 13,800
		HE400-0010	1000 mL	<sup>¥</sup> 19,600
HE400 medium	_	HE400-0060	1000 mL x 6	<sup>¥</sup> 105,000
		HE400-0360	1000 mL x 36	<sup>¥</sup> 559,000
		HE400 powder	5L, 10L, 50L, etc.	Contact us
		HE400AZ-0005	500 mL	<sup>¥</sup> 15,200
		HE400AZ-0010	1000 mL	<sup>¥</sup> 21,600
HE400AZ medium	L-alariyi-	HE400AZ-0060	1000 mL x 6	<sup>¥</sup> 116,000
	L-giutamine	HE400AZ-0360	1000 mL x 36	<sup>¥</sup> 616,000
		HE400AZ powder	5L, 10L, 50L, etc.	Contact us



# Suspension culture HE200 medium



HE200 medium is a chemically defined medium optimized for the high production of recombinant proteins in 293 cells, such as Expi293F, 293-F, 293T, and HEK293 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

HE200 medium leads to the high performance similar to Thermo FreeStyle 293 Expression medium in cell culture for 293 cells.

#### Figure) Growth assay on four types of 293 cells.



Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		HE200-0005	500 mL	<sup>¥</sup> 6,900
		HE200-0010	1000 mL	¥ 9,800
HE200 medium	_	HE200-0060	1000 mL x 6	<sup>¥</sup> 52,900
		HE200-0360	1000 mL x 36	¥ 280,000
		HE200 powder	5L, 10L, 50L, etc.	Contact us



# Suspension culture HE300/HE300AZ medium



HE300/HE300AZ medium is a chemically defined medium optimized for the high production of recombinant proteins in 293 cells, such as Expi293F, 293-F, 293T, and HEK293 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

HE300/HE300AZ medium leads to the high performance similar to Thermo FreeStyle 293 Expression medium in cell culture for 293 cells.

Figure) Growth assay on four types of 293 cells.



Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		HE300-0005	500 mL	¥ 9,100
		HE300-0010	1000 mL	¥ 12,900
HE300 medium	-	HE300-0060	1000 mL x 6	<sup>¥</sup> 69,400
		HE300-0360	1000 mL x 36	<sup>¥</sup> 369,000
	HE300 powder	5L, 10L, 50L, etc.	Contact us	
		HE300AZ-0005	500 mL	¥ 9,800
		HE300AZ-0010	1000 mL	<sup>¥</sup> 13,900
HE300AZ medium		HE300AZ-0060	1000 mL x 6	¥ 74,800
	L-giutamine	HE300AZ-0360	1000 mL x 36	¥ 398,000
		HE300AZ powder	5L, 10L, 50L, etc.	Contact us



# Fed-batch culture | Feed medium Gxpress 293 Feed medium



Gxpress 293 Feed medium is a chemically defined medium medium for using in fed-batch culture and optimized for the high production of recombinant proteins in 293 cells, such as Expi293F, 293-F, 293T, and HEK293 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

Fed-Batch Culture / HE300AZ medium Inoculation of 3.0 x 10<sup>6</sup> cells/mL Shaker suspension culture (125 rpm) Using Expi293F cells adapted to HE300AZ medium Addition of Feed medium on 3<sup>rd</sup> days (10% volume) Fed-Batch Culture / HE300AZ medium Inoculation of 3.0 x 10<sup>6</sup> cells/mL Shaker suspension culture (125 rpm) Using 293T cells adapted to HE300AZ medium Addition of Feed medium on 3<sup>rd</sup> days (10% volume)





Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		GX293-FD-0005	500 mL	¥ 16,500
		GX293-FD-0010	1000 mL	<sup>¥</sup> 23,400
Gxpress 293 Feed medium	-	GX293-FD-0060	1000 mL x 6	<sup>¥</sup> 126,000
		GX293-FD-0360	1000 mL x 36	<sup>¥</sup> 668,000
		GX293-FD powder	5L, 10L, 50L, etc.	Contact us



GMEP® chemically defined medium has been developed for serum-free culture of CHO cells, such as CHO-S, CHO-K1, DG44, or DXB11 cells, and the high production of recombinant proteins or the transfection assay. All contents are a chemically defined composition that no contains serum, protein, animal origin, hydrolysates, and no unknown composition.



# Adherent culture CH100 medium

Figure) Growth assay of CHO-S cells or CHO-K1 cells on adherent culture.



CH100 medium is a chemically defined medium optimized for the adherent growth of CHO cells, such as CHO-S, CHO-K1, DG44, and DXB11 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		CH100-0005	500 mL	¥ 11,600
CH100 modium		CH100-0010	1000 mL	<sup>¥</sup> 16,500
CHIOLINEGIGIU	_	CH100-0060	1000 mL x 6	¥ 89,000
		CH100 powder	5L, 10L, 50L, etc.	Contact us



# Single cell cloning assay CH150 medium

CH150 medium is a chemically defined medium / serum-free medium optimized for the single-cell growth of CHO cells, such as CHO-S, CHO-K1, and DG44 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.



Product Name	Glutamine	Catalog Number	Size	Price (JPY)
CH150 medium	_	CH150-0005	500 mL	<sup>¥</sup> 11,600



GMEP® chemically defined medium for suspension culture of hamster CHO cells (CHO-S, CHO-K1, DG44, DXB11, etc.) can be used for recombinant protein production. GMEP® have a lineup with different nutrition ratios and prices.

Suspension | Product Lineup



Classification	Serum	Animal Origin	Protein	Endotoxin	Mycoplasma	Antibiotics	Phenol Red
Chemically Defined	Free	Free	Free	< 0.25 EU/mL * Colorimetry	Negative * Real-time PCR	No	No

The line up of three grades. You can select the optimal medium according to the test scenes using CHO cells.

Chemically defined medium	CH200	CH300/AZ medium		CH400/AZ medium	
(CHO cells)	medium	CH300	CH300AZ	CH400	CH400AZ
L-Glutamine		-	-	_	_
L-Alanyl-L-glutamine		-	•	- •	
Nutrition ratio (composition)	1.0	1.2 1		L.8	
Final cell density (cells/mL) *1	$0.7 - 1.0 \times 10^7$	1.0-3.0 x 10 <sup>7</sup>		1.5-2.0 x 10 <sup>7</sup>	
Transfection assay *2	•	•			
Adaptation culture *3	•	• •			
Subculture (>100 days)	•	•			
Fed-batch culture *4	•	•			
Price (1000 mL)	<sup>¥</sup> 9,800	<sup>¥</sup> 12,900	<sup>¥</sup> 13,900	<sup>¥</sup> 19,600	<sup>¥</sup> 21,600

\*1 Growth assay of CHO-S and CHO-K1 cells.

\*2 Transfection assay with Gxpress CHO Transfection kit using CHO-S and CHO-K1 cells.

\*3 Adaptation culture of CHO-S and CHO-K1 cells.

\*4 Fed-batch culture with Gxpress CHO Feed medium using CHO-S and CHO-K1 cells.



# Suspension culture CH400/CH400AZ medium



CH400/CH400AZ medium is a chemically defined medium optimized for the high production of recombinant proteins in CHO cells, such as CHO-S, CHO-K1, DG44, and DXB11 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

CH400/CH400AZ medium leads to the high performance similar to Thermo CD OptiCHO medium in cell culture for CHO cells.







Product Name	Glutamine	Catalog Number	Size	Price (JPY)
CH400 medium	-	CH400-0005 CH400-0010 CH400-0060 CH400-0360 CH400 powder	500 mL 1000 mL 1000 mL x 6 1000 mL x 36 5L, 10L, 50L, etc.	<sup>¥</sup> 13,800 <sup>¥</sup> 19,600 <sup>¥</sup> 105,000 <sup>¥</sup> 559,000 Contact us
CH400AZ medium	L-alanyl- L-glutamine	CH400AZ-0005 CH400AZ-0010 CH400AZ-0060 CH400AZ-0360 CH400AZ powder	500 mL 1000 mL 1000 mL x 6 1000 mL x 36 5L, 10L, 50L, etc.	<sup>¥</sup> 15,200 <sup>¥</sup> 21,600 <sup>¥</sup> 116,000 <sup>¥</sup> 616,000 Contact us



# Suspension culture CH200 medium



CH200 medium is a chemically defined medium optimized for the high production of recombinant proteins in CHO cells, such as CHO-S, CHO-K1, DG44, and DXB11 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

CH200 medium leads to the high performance similar to Thermo CD OptiCHO medium in cell culture for CHO cells.



Fig. 2) Growth assay of CHO-K1 cells



#### Fig. 3) Recombinant protein production on CHO-S cells and CHO-K cells.



Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		CH200-0005	500 mL	¥ 6,900
		CH200-0010	1000 mL	¥ 9,800
CH200 medium	_	CH200-0060	1000 mL x 6	<sup>¥</sup> 52,900
		CH200-0360	1000 mL x 36	¥ 280,000
		CH200 powder	5L, 10L, 50L, etc.	Contact us

#### Fig. 1 ) Growth assay of CHO-S cells



CH300 medium

# Suspension culture CH300/CH300AZ medium



CH300/CH300AZ medium is a chemically defined medium optimized for the high production of recombinant proteins in CHO cells, such as CHO-S, CHO-K1, DG44, and DXB11 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

CH300/CH300AZ medium leads to the high performance similar to Thermo CD OptiCHO medium in cell culture for CHO cells.

Fig. 2) Growth assay of CHO-K1 cells

CHO-K1 cells

Seeding density:

2 x 10<sup>5</sup> cells/mL

#### Fig. 1) Growth assay of CHO-S cells



15



Fig. 3) Recombinant protein production on CHO-K cells.



Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		CH300-0005	500 mL	¥ 9,100
		CH300-0010	1000 mL	<sup>¥</sup> 12,900
CH300 medium	_	CH300-0060	1000 mL x 6	<sup>¥</sup> 69,400
		CH300-0360	1000 mL x 36	<sup>¥</sup> 369,000
		CH300 powder	5L, 10L, 50L, etc.	Contact us
		CH300AZ-0005	500 mL	¥ 9,800
		CH300AZ-0010	1000 mL	¥ 13,900
CH300AZ medium	L-alanyi-	CH300AZ-0060	1000 mL x 6	¥ 74,800
	L-giutamine	CH300AZ-0360	1000 mL x 36	<sup>¥</sup> 398,000
		CH300AZ powder	5L, 10L, 50L, etc.	Contact us



# Fed-batch culture | Feed medium Gxpress CHO Feed medium



Gxpress CHO Feed medium is a chemically defined medium medium for using in fed-batch culture and optimized for the high production of recombinant proteins in CHO cells, such as CHO-S, CHO-K1, DG44, and DXB11 cells. The medium contains no proteins, hydrolysates, or components of animal and plant composition. All components have a known chemical structure.

Product Name	Glutamine	Catalog Number	Size	Price (JPY)
		GXCHO-FD-0005	500 mL	¥ 16,500
		GXCHO-FD-0010	1000 mL	<sup>¥</sup> 23,400
Gxpress CHO Feed medium	_	GXCHO-FD-0060	1000 mL x 6	¥ 126,000
		GXCHO-FD-0360	1000 mL x 36	<sup>¥</sup> 668,000
		GXCHO-FD powder	5L, 10L, 50L, etc.	Contact us

# Anti-Clumping reagent Scattering reagent CHO



Scattering reagent CHO is a chemically defined reagent to suppress cell clumping or aggregated state in suspension culture of Chinese hamster ovary (CHO) cells, such as CHO-K1, CHO-S, DG44, and DXB11. The reagent contains no proteins, hydrolysates, or animal/plant components. All components have a known chemical structure.

Product Name	Glutamine	Catalog Number	Size	Price (JPY)
Scattering reagent CHO	_	SRCHO-005 SRCHO-060	50 mL 50 mL x 12	<sup>¥</sup> 9,800 <sup>¥</sup> 89,000



GMEP® chemically defined medium can be used in serum-free culture using human normal fibroblasts or hybridoma and myelomas. The medium is with high homogeneity, not containing proteins, animal/plant components, and hydrolysates.

# FI200 Medium



FI200 medium is a chemically defined medium optimized for the growth of normal human fibroblasts (NHDF cells, MRC-5 cells, etc.) in serum-free culture. All components have a known chemical structure.

Product Name	Glutamine	Catalog Number	Size	Price (JPY)
FI200 medium	_	FI200-0010	1000 mL	¥9,800
		FI200-0060	1000 mL x 6	¥52,900
		FI200-0360	1000 mL x 36	¥280,000

# HY350 Medium



HY350 medium is a chemically defined medium optimized for the growth and antibody production of hybridoma or myeloma in serum-free culture. All components have a known chemical structure.

#### The line up of three grades. You can select the optimal medium according to the test scenes.

Product Name	Glutamine	Catalog Number	Size	Price (JPY)
HY350 medium	_	HY350-0010	1000 mL	¥12,900
		HY350-0060	1000 mL x 6	¥69,400
		HY350 Powder	Provided in request	Contact us
HY300 medium	_	HY300-0010	1000 mL	¥12,900
		HY300-0060	1000 mL x 6	¥69,400
		HY300 Powder	Provided in request	Contact us
HY200 medium	_	HY200-0010	1000 mL	¥9,800
		HY200-0060	1000 mL x 6	¥52,900
		HY200 Powder	Provided in request	Contact us

#### **Custom Services**



We offer custom services to suit your needs with our motto "High Performance, High Quality, Low Price". GMEP® services have developed using our advanced technological capabilities.

# **Our Services**

#### O Manufacturing Services With Liquid And Powder

- $\sim$  Working closely with your project goals, our services are the follows.
- · Chemically Defined Medium and Serum-Free Medium
- Customized Medium (Original Formulation)
- · Classical Medium (DMEM or DMEM/F-12 Without Request Components, etc.)
- · Supplement (Feed or CDL) and Solution/Buffer

#### O Accelerating Your Cell Culture Through Collaboration

- $\sim$  Working closely with your cell culture, our services are the follows.
- Develop and Analyze Your Customized Medium and Supplement (Feed medium)
- Optimize Cell Medium for Your Strategies on Serum-Free Culture
- · Adapt Your Cells to Chemically Defined Medium
- Offer Private Brand of Chemically Defined Medium

http://gmep.co.jp/E-Home.html e-mail: info@gmep.co.jp TEL:+81 0942 65 4463

Gmep Incorporated Hyakunen Park, Kurume, Fukuoka, Japan 8390864

WEB : https://gmep.co.jp TEL : +81-0942-65-4463

 The listed price is as of April 2019. Please note in advance that the prices and product configurations described may change.
 These items are for research use only. Please do not use for human and animal diagnosis, treatment, other conditions.

