CD 293 TGE Medium, 1X, Liquid

Catalog No#: CM-1156-11

For Research Use Only

Description

CD 293 TGE Medium is a proprietary, chemically defined, animal origin-free medium specifically developed for the high-density, suspension culture and transfection of 293 cells. Transient expression of plasmid DNA in HEK293 cells adapted in this medium can get high volumetric productivity of target proteins. Used with BPfectin, 293 Expression MAX-1 and Feed X Supplement together is recommended for higher yield of protein expression.

CD 293 TGE Medium is specifically formulated for use with:

- Suspension HEK293 (293T, 293EBNA, 293F) transient expression
- Suspension culture of HEK293 stable cell line for protein expression
- Large-scale, high-density growth of HEK293 cells in bioreactors

Features :

- Support suspension HEK 293(293T, 293EBNA, 293F) transient expression
- >200% cell growth and expression performance compared competitive alternatives
- Prepared ready-to-use, with no supplementation required
- Protein free, animal component free, chemically define and regulatory friendly
- Extensive support by our cell culture experts

Storage:

Important : CD 293 TGE Medium is very sensitive to light and should be stored at 2-8℃ and in the dark. For optimal results, use media protected from light.

General Specification:

Concentration	Cell Line	Form	Serum	Endotoxin	Glutamine	Culture Type	Phenol Red
1X	293	Liquid	Serum Free	Low	Yes	Suspension Culture	Yes
Product Classification			**Buffer System**		**Regulatory Statement**		**Shelf Life**
Protein-Free, Chemically Defined, Serum-Free, Animal Origin-Free			Sodium Bicarbonate		For Research and Further Cell Culture Manufacturing Use Only		12 months
Catalog #	**Product Name**			**Product Size**		**Storage**	**Shipping**
CM-1156-11	CD 293 TGE Medium, Liquid			1000 mL		at +2 - 8℃, in dark	Ice pack

Related Products:

Catalog #	Product Name	Product Size	Description
CM-1156-11	CD 293 TGE Medium, 1X, Liquid	1000mL	Cell culture medium
TF-1157-11	BPfectin	1.5 mL	Transfection reagent for suspension culture
EXP-711-11	293 Expression MAX-1	1 mL	Supplement for transient expression process
CF-1116-12	Feed X Supplement	500 mL	Supplement for transient expression process
AC-1112-11	Anti-Clumping Additive	1mL	Supplement for after cationic lipid transient expression process

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Usage protocol for BPfectin, 293 Expression MAX-1 and Feed X Supplement :

1. Before transfection, passage 293 cells with **CD 293 TGE Medium** for at least 3 round from an adaptation procedure, seeding density greater than 0.5 ×10^6 cells/ml, cell viability >95%. Culture at 150-180 rpm depending on your orbital shaker design and single cell distribution status.
2. Seed 293 cells at 0.5 ×10^6 cells/ml and transfer to pre-warmed fresh medium, subsequently grow the cells to 1.5 to 2.2 ×10^6 cells/ml.
3. The day before transfection, dilute the culture with fresh medium to 0.8 to 1.0 ×10^6 cells/ml and cell density at transfection should range from 1.5 × 10^6 to 2.0 × 10^6 cells/ml, provided the doubling time is 24 h and viability is greater than 95%.
4. On the day of transfection, using sterile 150 mM NaCl solution to dilute DNA plasmid and add **293 Expression MAX-1** (Catalog # EXP-711-11) according to the instruction.
5. Add **BPfectin** (Catalog # TF-1157-11) at ratio of 3:1 (BPfectin : DNA;volume/weight) to DNA solution mix well with vortex for 3 sec.
   Note: DNA dosage for transfection is 1 ug per 1 million cells in culture, and volume of DNA-BPfectin complexes is 5% (v/v) of culture.(e.g. 500 µL to 10 mL culture).
6. Incubate the complexes at RT for 10 min before transfection.
7. Add DNA-BPfectin complexes to cells at 5% volume ratio mix well gently.
8. 24 hours post transfection, add **Feed X Supplement** (Catalog # CF-1116-12) to culture at 10% volume ratio (e.g. 1 mL to 10mL culture)
9. Harvest for purification typically 7 days post transfection or when cell viability drops below 55%.

Table 1:Ratio for transfection complexes formation

Plasmid for transfection	293 Expression MAX-1	BPfectin	293 culture
10µg	4µL	30µL	10 million cells

Timeline	On the day of transfection				24h post transfection
	1	2	3	4	5
Steps	Dilute DNA and 293 Expression MAX-1 with 150 mM NaCl Mix well	Add BPfectin dropwise to DNA Vortex for 3 sec	Incubate at RT for 10 min	Add DNA-BPfectin complexes to cells	Add Feed X Supplement 10% (v/v)
Diagram