

Revolutionary pMH Expression Vector Data

3-hour expression demonstrates the unmatched strength of AmProtein's expression vector series

Introduction

The use of AmProtein's expression vector has resulted in high PCDs up to 1-2 times higher than current industry standards. Not only effective on antibodies, our expression vector yields high titers for recombinant proteins and makes traditionally difficult to express proteins practical for commercialization.

FEATURES OF AMPROTEIN'S pMH VECTOR SERIES:

- ◆ One can reach commercial level protein titers after only a few laboratory-scale stable gene transfections.
- ◆ Used successfully in over 20 recombinant proteins and antibodies.
- ◆ Reaches 50-300pg/cell/day in 96-well plates for larger proteins (ie. antibodies) and 20-90pg/cell/day in 96-well plates for small proteins (ie. FSH and HBsAg).
- ◆ A known universal vector set working in mammalian, chicken and fish cells.

Upstream Advantage

Table listing the expression level of non-confidential projects in CHO cells after stable gene transfections.

Project Name	Expression Level (pg/cell/day)
Enbrel	116
Anti - EGFR	80
Anti - Anthrax	90
HSA	271
Anti - CD52	118
Anti - Rabies	50
EPO	72
HBsAg	90
LH	30
FSH	10
HER2	120
Anti - CD20	80
Anti - IgE	94
Fc-IL-1ra	120
EPO-HyperG	300

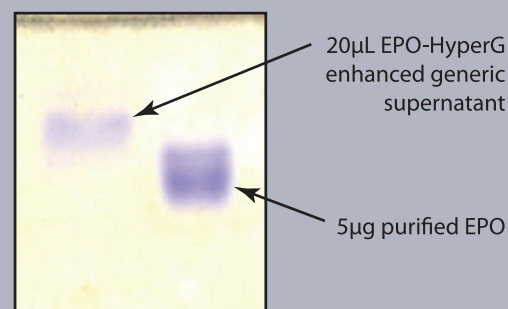
Available Products & Services

**Expression Vector Commercial Licensing,
Commercial Production Cell Line Development, and
Commercial Protein/Antibody Production & Process Development**

AmProtein's expression vector is available for licensing.
Please contact info@amprotein.com for further information.
Published Patent Application: WO/2008/091276

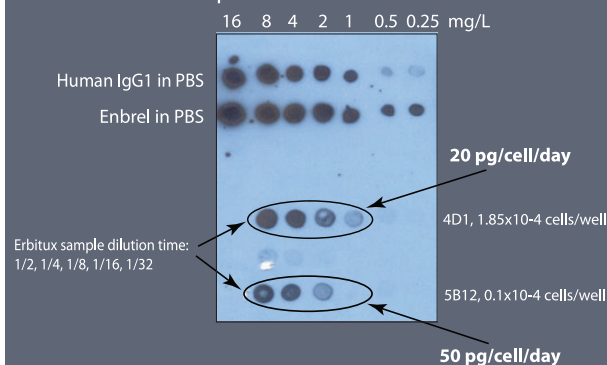
Miracle

Direct comassie blue staining of hyperglycosylated EPO supernatant from 96 well plate of 24-hour culture



Dilution of clones expressing Erbitux

Dot-blot quantitation of Erbitux clones



AmProtein's expression vector results in extremely high protein titers in 96-well plates in only 3 hours. As shown above, the signal is still clearly visible after 2,4,8, and even 16x dilution!

Process	Normal	Ours
Cell transfection	Transfection, 1 day	Transfection, 1 day
	DHFR selection, 10 days	G418 selection, 5 days
Cell cloning/growth	Growth & MTX gene copy amplification, 4 months	Growth, 7 days
Screening	ELISA, 1 day	Dot-blot or ELISA, 1 day
Expression level	15-45 pg/cell/day	50-120 pg/cell/day
Time	4.5 months	14 days

Comparison timeline of high-yield cell line selection process highlighting AmProtein's upstream advantage.