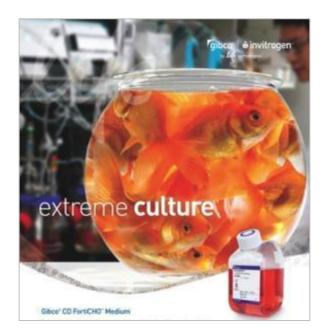
## Gibco<sup>®</sup> CHO Productivity Maximization Helping to enable technologies in fed-batch cell culture



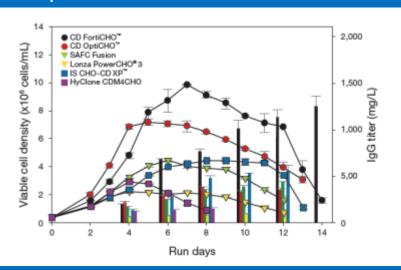
Products and services for fast, robust, scalable CHO cell culture process development and manufacturing

- Proven Gibco<sup>®</sup> quality and reliability for 50 years trusted by top Biopharmaceutical companies worldwide
- Up to 50% increase in basal medium titers over other commercial alternatives
- 2- 5 fold titer improvements using optimized feeds compared to batch culture
- Sustained specific productivity with increased volumetric productivity
- Integrated portfolio solutions including cells, media, feeds, services, custom formats

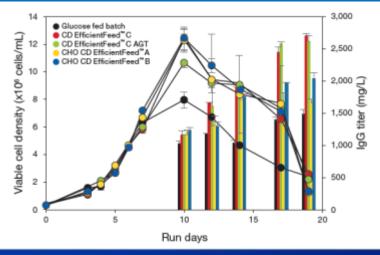
Features	Benefits	Products and Services
<ul> <li>Superior titers</li> <li>Sustained cell productivity</li> <li>Extended high-viability cell culture</li> <li>Chemically-defined, AOF media and feeds</li> <li>Available in custom sizes and AGT<sup>™</sup> format</li> <li>Worldwide technical support</li> </ul>	<ul> <li>Helps increase protein production in less time</li> <li>Helps simplify downstream processing by providing healthier cells at harvest</li> <li>Helps facilitate regulatory compliance</li> <li>Helps enable efficient scale-up</li> </ul>	<ul> <li>Media         <ul> <li>CD FortiCHO™</li> <li>CD OptiCHO™</li> <li>CD CHO</li> </ul> </li> <li>EfficientFeed™ Nutrient Supplements</li> <li>PD-Direct Media Development and Analytical Services</li> </ul>

## Helping raise standards in fed-batch cell culture Gibco® CHO Productivity Maximization

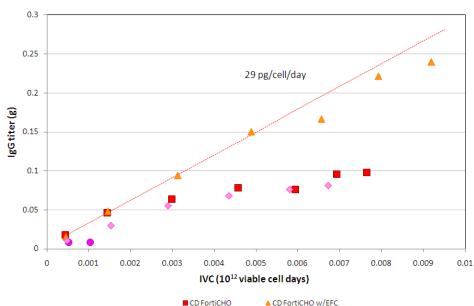
## Up to 50% increase in basal medium titers



## Up to 120% increase in fed-batch titers



Sustained specific productivity
 with increased volumetric productivity



CD FortiCHO
 ▲ CD FortiCHO w/EFC
 CD OptiCHO
 CD OptiCHO