Cell therapy products for T cell immunotherapy development

Transition from research to clinic with confidence

Whether you're developing a CAR T therapy or another type of T cell immunotherapy, or you're working with other immune cells, our products are designed to help you transition from research to the clinic and beyond. We offer isolation, activation, culture, and gene transfer solutions, as well as characterization and QC analytics for a variety of immune cell types.

Capabilities that span the immunotherapy workflow

- A large portfolio of products that cover the entire workflow from isolation to clinical lot release testing
- Quality raw materials, service, and support from early stages through clinical use and commercialization

Our mission to support your journey

- High-quality Gibco[™] Cell Therapy Systems (CTS[™])
 reagents that are designed with the clinical endpoint
 in mind to help minimize the time from discovery to
 approved therapy
- Robust and reproducible assays that enable characterization and release of T cell therapy products
- A dedicated team of experienced scientists and regulatory professionals to provide product support from research through clinical trials and commercial manufacturing

Time and cost savings

Starting with CTS reagents helps eliminate the need to re-qualify or change raw materials when transitioning from research to clinic—saving time and cost associated with repeating experiments.

When you choose CTS products, expect:

- GMP-manufactured products designed for cell therapy research through commercial use
 - Xeno-free and animal origin-free formulations
 - Manufactured in conformity with GMP for medical devices 21 CFR Part 820 and follow USP <1043> and Ph Eur 5.2.12 guidelines
 - FDA-registered manufacturing site with
 30 years of GMP manufacturing expertise and an
 ISO 13485-certified quality management system
- Safety testing including sterility, endotoxin levels, and mycoplasmas on applicable products
- Regulatory documentation to aid with regulatory approval and help expedite your speed to market including Drug Master Files, Regulatory Support Files, and more



Selected T cell workflow products



Gibco™ isolation and activation

CTS™ Dynabeads™ CD3/CD28 (40203D)

Dynabeads™ Human T-Expander CD3/CD28 (11141D) (compatible with 40203D)

CTS™ Dynabeads™ Treg Xpander (46000D)

Gibco[™] magnet

CTS™ DynaMag™ Magnet (12102)

Gibco™ cell processing system

CTS™ Rotea™ Counterflow Centrifugation System + 2-year warranty (including OQ after PM) + IQOQ (A50757*, A47695**)

CTS[™] Rotea[™] Counterflow Centrifugation System + 2-year warranty (including PM) (A50760*, A47679**)

Gibco™ cell processing consumables

CTS[™] Rotea[™] Single-Use Kit, 10 pk (A49585) CTS[™] Rotea[™] Single-Use Kit, 5 pk (A49313) CTS[™] Rotea[™] Hi-Flow Single-Use Kit, 10 pk (A46575)

CTS™ Rotea™ Hi-Flow Single-Use Kit, 5 pk (A49239)



Gibco™ lentiviral production systems

LV-MAX™ Lentiviral Production System

CTS[™] LV-MAX[™] Transfection Kit (A4132601, A4132602)

CTS[™] LV-MAX[™] Production Medium (A4124003, A4124002, A4124001)

CTS™ Viral Production Cells (A3152801)

CTS[™] Opti-MEM[™] I Medium (A4124801, A4124802)

Gibco™ gene editing

TrueCut™ Cas9 Protein (CTS™-Prototype) (A45220P)

Invitrogen™ gene editing

CRISPR-Cas9 and designer TALEN products and services (thermofisher.com/crispr)

TrueGuide™ Synthetic gRNA (thermofisher.com/crispr)

TrueCut™ Cas9 Protein v2 (A36498, A36499)

Invitrogen™ electroporation device

Neon™ Transfection System (MPK5000S)

Invitrogen™ transfection reagents

Lipofectamine™ 3000 Transfection Reagent (L3000008)

Lipofectamine™ 2000 CD Transfection Reagent (12566014)

Lipofectamine™ MessengerMAX™ Transfection Reagent (LMRNA008)



Gibco™ catalog and custom media

CTS[™] OpTmizer[™] T-Cell Expansion SFM (A1048503, A1048501)

CTS[™] OpTmizer[™] T-Cell Expansion SFM, no phenol red (A3705001, A3705003)
CTS[™] OpTmizer[™] Pro SFM (A4966103,

A4966101) ${\rm CTS^{\tiny M}} \; {\rm AIM\text{-}V^{\tiny M}} \; {\rm SFM} \; (0870112 {\rm DK}, \; 0870112 {\rm BK})$

CTS™ AIM-V™ Medium, without phenol red, without antibiotics (A3830802, A3830801, A4672701)

Custom media and services (request information)

Gibco™ growth factors

GM-CSF (CTP2011) Interleukin 2 (CTP0021)

Interleukin 4 (CTP0041) Interleukin 7 (CTP0071 Interleukin 15 (PHC9151)

Gibco™ cell culture supplements

CTS™ GlutaMAX™-I Supplement (A1286001, A4737001) CTS™ Immune Cell SR (A2596101, A2596102)

Gibco cell processing system

CTS Rotea Counterflow Centrifugation System + 2 year warranty (including OQ after PM) + IQOQ (A50757*, A47695**)

CTS Rotea Counterflow Centrifugation System + 2 year warranty (including PM) (A50760*, A47679**)

Gibco cell processing consumables

CTS Rotea Single-Use Kit, 10 pk (A49585) CTS Rotea Single-Use Kit, 5 pk (A49313) CTS Rotea Hi-Flow Single-Use Kit, 10 pk (A46575)

CTS Rotea Hi-Flow Single-Use Kit, 5 pk (A49239)



Gibco[™] wash

magnesium chloride (A1285601, A1285602)

Gibco™ cryopreservation

CTS™ DPBS, without calcium chloride, without CTS™ Synth-a-Freeze™ Medium (A1371301)

Gibco magnet

CTS DynaMag Magnet (12102)



Lot release and characterization

Applied Biosystems[™] assays

PureQuant™ CD8+ T Cell Assay (A43674) PureQuant™ Treg Assay (A43675) PureQuant™ Th17 Assay (A43676)

PureQuant™ CD3+ T Cell Assay (A47197) PureQuant™ CD4+ T Cell Assay (A47194)

PureQuant™ B Cell Assay (A47196) PureQuant™ Monocyte Assay (A47195)

MycoSEQ™ Mycoplasma Detection Kit (4460623)

resDNASEQ™ Human Residual DNA Quantitation Kit (A26366)

resDNASEQ™ Quantitative HEK293 DNA Kit with PrepSEQ™ Residual DNA Sample Preparation Kit (A46565)

Invitrogen[™] assays

eBioscience™ Essential Human T Cell Phenotyping Kit (A42923)

eBioscience™ Essential Human Treg Phenotyping Kit (A42925)

eBioscience™ Essential Human Th1/Th17 Phenotyping Kit (A42927)

CyQUANT™ LDH Cytotoxicity Assay (C20300)

ProcartaPlex™ multiplex immunoassays (thermofisher.com/procartaplex)

Invitrogen[™] instrumentation

Attune™ NxT Flow Cytometer (A24858) Attune™ NxT Software 21 CFR Part 11, 5 users (A47289)

Attune™ NxT Software 21 CFR Part 11, 10 users (A47290)

Thermo Scientific™ assay

Pierce[™] LAL Chromogenic Endotoxin Quantitation Kit (88282)

^{**} Rest of world.





^{*} North America and Europe