

Human T Cell Research

From sourcing your starting sample to downstream T cell analysis, explore our complete portfolio of products to support your human T cell research workflow.

Source Your Starting Sample

Human Primary Cells

Start your T cell workflow from a variety of starting samples, such as whole blood or Leukapheresis Packs, or directly from fresh or frozen primary cells (regional restrictions apply*).

Generate or Isolate Human T Cells

T Cell Isolation From Whole Blood

Isolate T cells via density gradient centrifugation.

RosetteSep™ Cell Enrichment Cocktails
+
SepMate™ PBMC Isolation Tubes
+
Lymphoprep™ Density Gradient Medium

OR

Isolate T cells via immunomagnetic cell separation.

EasySep™ Direct Immunomagnetic Cell Isolation Kits

Whole Peripheral Blood

Peripheral Blood Leukapheresis Pack

Fresh or Frozen Human PBMCs

Fresh or Frozen Human T Cells

Cord Blood

Frozen CD34+ Cells

PBMC Isolation

Isolate PBMCs in just 15 minutes.

SepMate™ PBMC Isolation Tubes
+
Lymphoprep™ Density Gradient Medium

CD34+ Cell Isolation

Isolate CD34+ cells via density gradient centrifugation.

RosetteSep™ Cell Enrichment Cocktail
+
SepMate™ PBMC Isolation Tubes
+
Lymphoprep™ Density Gradient Medium

OR

Isolate CD34+ cells using immunomagnetic positive selection.

EasySep™ Positive Selection Kit

Immunomagnetic T Cell Separation

Isolate unlabeled T cells in as little as 8 minutes using negative selection.

EasySep™ Cell Isolation Kits

OR

Isolate T cells using positive selection.

EasySep™ Positive Selection Kits

OR

Positively select T cells and then release bound magnetic particles.

EasySep™ Release Positive Selection Kits

T Cell Generation

Generate T cells from CD34+ cells.

StemSpan™ T Cell Generation Kit

Why Use Our Cell Separation Technologies?

FAST. Isolate various T cell subsets in as little as 8 minutes.

VERSATILE. Isolate cells from virtually any sample source.

HIGH PURITY. Achieve up to 99% cell purity with high recoveries.

GENTLE. Obtain viable, functional cells without the need for columns and washes.

AUTOMATABLE. Use RoboSep™ instruments to fully automate your EasySep™ cell separation.

Genetically Modify, Expand, or Differentiate Human T Cells

ImmunoCult™

Activate, expand, and differentiate immune cell subsets without the use of serum or beads with ImmunoCult™ products.

ArciTect™ CRISPR-Cas9 System

Perform high-efficiency genome editing of human T cells using ArciTect™, a ribonucleoprotein-based CRISPR-Cas9 system.

CD4+ T Cell Differentiation

Differentiate human Th1, Th2, or Tregs from naïve CD4+ T cells.

ImmunoCult™ Human T Cell Activators
+
ImmunoCult™-XF T Cell Expansion Medium
+
ImmunoCult™ Human T Cell Differentiation Supplements

OR

Cytokines

T Cell Engineering

Genetically modify human T cells with high efficiency.

ImmunoCult™ Human T Cell Activators
+
ArciTect™ CRISPR-Cas9 System
+
ImmunoCult™-XF T Cell Expansion Medium

T Cell Expansion

Expand human T cells without the use of serum.

ImmunoCult™ Human T Cell Activators
+
ImmunoCult™-XF T Cell Expansion Medium
+
Cytokines

Human T Cells

CD4+CD8+ T cells
CD8+ T cells

Cultured Human T Cells

Analyze and Cryopreserve Human T Cells

Learn more at www.stemcell.com

T Cell Analysis

Characterize and evaluate T cells.

Antibodies, ELISAs, Viability Dyes, and Molecular Biology Tools (for downstream gene expression analysis)

T Cell Cryopreservation

Cryopreserve T cells in cGMP-manufactured media.

CryoStor®

*Certain products are only available in select territories. Please contact your local Sales representative or the Product & Scientific Support team at techsupport@stemcell.com for further information.