

Invitra CBSC™

Invitra Cord Blood Stem Cells

Invitra Cord Blood Stem Cells (CBSC) is a minimally manipulated human tissue allograft suspension derived from umbilical cord blood. Invitrx Therapeutics utilizes a proprietary process to preserve the tissue characteristics and properties.

Stem cells were first identified in cord blood over 40 years ago. Since then cord blood has been used routinely for hematopoietic stem cell transplantation. Cord blood contains a mixed population of cells, including hematopoietic stem cells (HSC) and mesenchymal stem cells (MSC). These cells have the capacity to self-renew, release growth factors, and further develop into more specialized cells. These cells have also been associated with contributing to tissue homeostasis, anti-inflammatory responses, and antioxidant effects. This collection of cells can work together to provide a synergistic effect to offset the naturally occurring processes that typically derive from age and environmental factors.

Quality Assurance

Invitra CBSC™ is processed from donated umbilical cords from full term deliveries. All donors are Pre-screened and undergo comprehensive testing that includes:

- Behavioral risk assessment
- Physical assessment
- Donor medical history
- Communicable disease testing

Infectious disease testing is performed at a certified laboratory in accordance with the Clinical Laboratory Improvement Amendments of 1988 (CLIA) and 42 CFR part 493.

CBSC Concentration (pg/ml)

Anti-inflammatory

IL-1ra	168.3
IL-10	6.9
HGF	33.1
TNF RII	403.6
TGF-β-1	6,602.20

Wound Healing

VEGF	18.9
TGF-β-1	6,602.20
IL-6	24.2
PDGF-BB	1,689.00
HGF	33.1
bFGF	35
ANG-1	4,521.20
FGF-7	39.6

Homeostatic Cytokines

IL-2	5.4
IL-7	26.6
IL-15	109.1
TIMP-2	1,007.70
Lipocalin-2	2,053.50

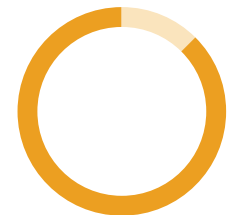
Growth Factors

ANG-1	4,521.20
bFGF	35
BMP-7	265.3
TGF-β-1	6,602.20
VEGF	18.9

Cell Type

Total Cell

CD 90-FITC	8.60±0.40
CD 73-PE	24.95±2.22
CD 105-PE/Cy7	12.72±0.45
CD 45-FITC	48.57±1.34
CD 34-PE	20.97±2.38
CD 14-PE/Cy7	16.74±0.95
CD 19-FITC	8.81±0.33
HLA-DR	19.62±1.23



Dedication to Excellence

Invitrx Therapeutics, headquartered in Orange County California is a global research-based biotechnology company with over 15 years of product development industry experience. Established in 2003, Invitrx Therapeutics has been a leading pioneer in Regenerative Stem Cell Therapies.