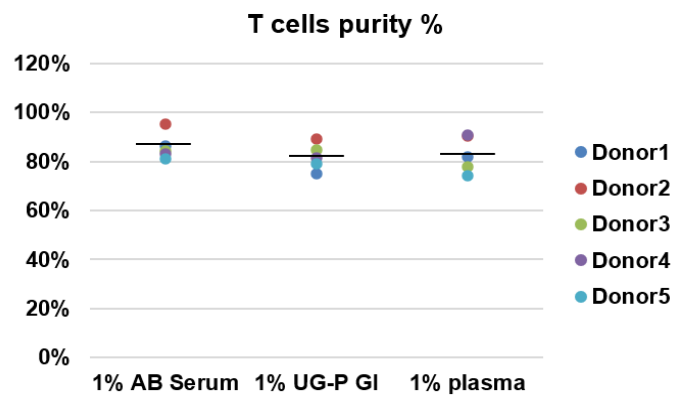
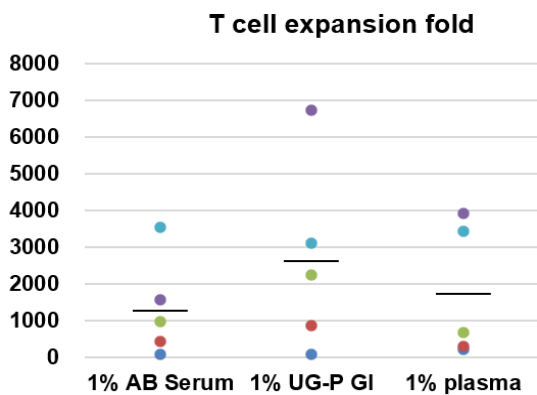


Xeno-free and Viral Inactivated for Therapeutic T cell Activation

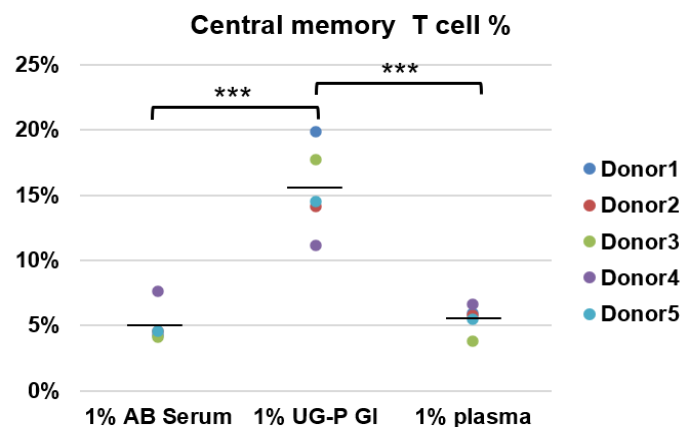
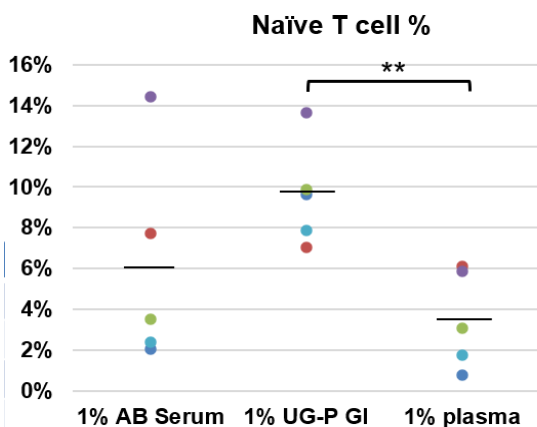
AventaCell BioMedical has adopted a state-of-the-art gamma irradiation process, as our pathogen reduction treatment (PRT), for viral inactivation to create the UltraGRO™-PURE GI (“UG-P GI”) product. The xeno-free fibrinogen-depleted human platelet lysate, UG-P GI offers minimized pathogen contamination risk while preserving potent cell culture performance with human immune cells and other applicable cell types for clinical applications.

Benefits of UltraGRO™-PURE GI

- US FDA FMD# 34284
- JAPAN PMDA Certificate
- Ph. Eur. General Chapter 5.2.12.4 Compliance
- Xeno-free serum substitute
- Abundant natural growth factors and proteins
- Gamma irradiation PRT accepted by all major regulatory agencies
- GI safeguard of 99.99%+ viral clearance
- Viral inactivated products w/o loss of potency
- Ideal for producing clinical grade immune cells

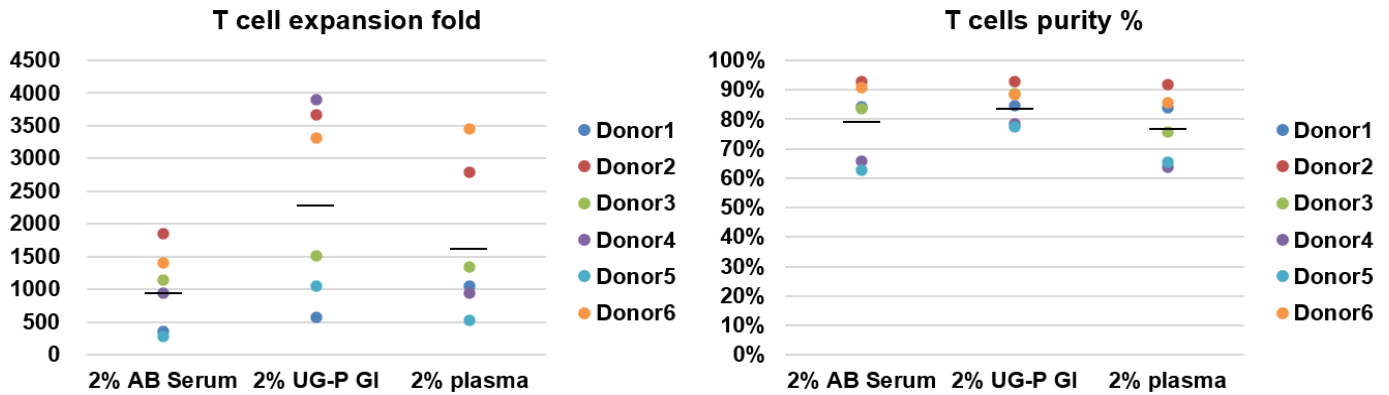


Greater expansion fold with higher Naïve and Central memory T cell population

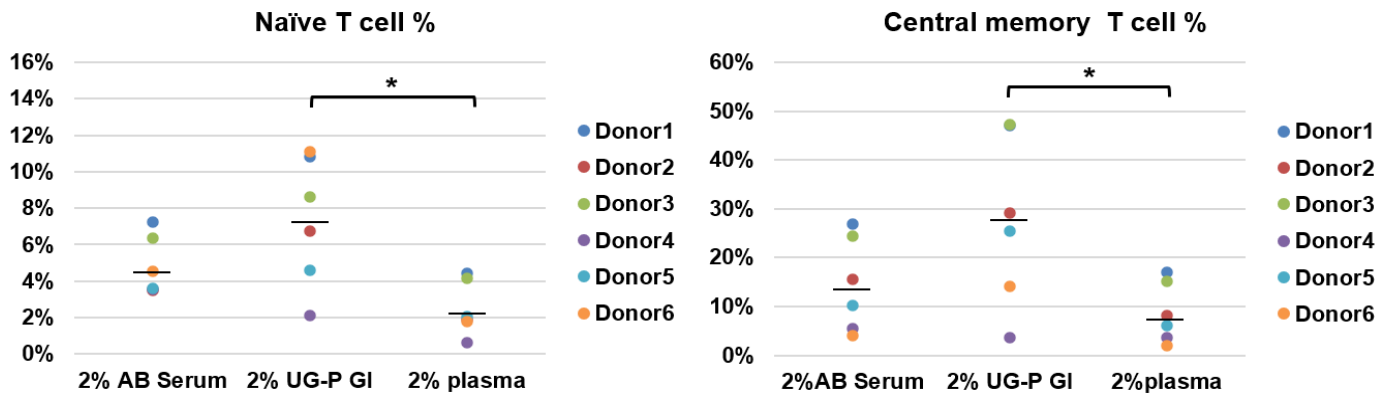


Ave (n = 5)	1% AB serum	1% UG-P GI	1% plasma
Expansion	1321 folds	2610 folds	1708 folds
T cell %	86	82	83
Naïve T %	6.0	9.6	2.5
CM T %	5.0	15.5	6

Fig 1. PBMCs were collected from 5 healthy donors, and T cells were activated by applying a commercial kit from supplier A, followed by the manufacturer’s protocol to compare the induction performance with AB serum, UG-P GI, and auto-plasma. The results showed greater T cells with higher population of Naïve and central memory T cells could be obtained by introducing UG-P GI.



Greater expansion fold with higher Naïve and Central memory T cell population



Ave (n = 6)	2% AB serum	2% UG-P GI	2% plasma
Expansion	998 folds	2336 folds	1527 folds
T cell %	80	85	78
Naïve T %	4.8	7.4	2.5
CM T %	14.4	27.8	8.6

Fig 2. PBMCs were collected from 6 healthy donors, and T cells were activated by applying a commercial kit from supplier B, followed by the manufacturer’s protocol to compare the induction performance with AB serum, UG-P GI, and auto-plasma. The results showed greater T cells with higher population of Naïve and central memory T cells could be obtained by introducing UG-P GI.



Greater Naïve T and central memory T cells were induced
Favorable for CAR-T cell production and immunotherapy

Ordering Information

Product Number	Product	Bottle Size (mL)
HPCHXCGLI05	UltraGRO™-PURE GI GMP	50
HPCHXCGLI10		100
HPCHXCGLI50		500

CliniSciences Group

Austria

Company: CliniSciences GmbH
Address: Sternwartestrasse 76, A-1180
Wien - Austria
Telephone: +43 720 115 580
Fax: +43 720 115 577
Email: oesterreich@clinisciences.com
Web: <https://www.clinisciences.com>



Belgium

Company: CliniSciences S.R.L
Address: Avenue Stalingrad 52, 1000
Brussels - Belgium
Telephone: +32 2 31 50 800
Fax: +32 2 31 50 801
Email: belgium@clinisciences.com
Web: <https://www.clinisciences.com>



Denmark

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1,
Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: danmark@clinisciences.com
Web: <https://www.clinisciences.com>



Finland

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1,
Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: suomi@clinisciences.com
Web: <https://www.clinisciences.com>



France

Company: CliniSciences S.A.S
Address: 74 Rue des Suisses, 92000
Nanterre - France
Telephone: +33 9 77 40 09 09
Fax: +33 9 77 40 10 11
Email: info@clinisciences.com
Web: <https://www.clinisciences.com>



Germany

Company: Biotrend Chemikalien GmbH
Address: Wilhelm-Mauser-Str. 41-43,
50827 Köln - Germany
Telephone: +49 221 9498 320
Fax: +49 221 9498 325
Email: info@biotrend.com
Web: <https://www.biotrend.com>



Iceland

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1,
Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: island@clinisciences.com
Web: <https://www.clinisciences.com>



Ireland

Company: CliniSciences Limited
Address: Ground Floor, 71 lower Baggot street
Dublin D02 P593 - Ireland
Telephone: +353 1 6971 146
Fax: +353 1 6971 147
Email: ireland@clinisciences.com
Web: <https://www.clinisciences.com>



Italy

Company: CliniSciences S.r.l
Address: Via Maremmana inferiore 378
Roma 00012 Guidonia Montecelio - Italy
Telephone: +39 06 94 80 56 71
Fax: +39 06 94 80 00 21
Email: italia@clinisciences.com
Web: <https://www.clinisciences.com>



Netherlands

Company: CliniSciences B.V.
Address: Kraaijenhoffstraat 137A,
1018RG Amsterdam, Netherlands
Telephone: +31 85 2082 351
Fax: +31 85 2082 353
Email: nederland@clinisciences.com
Web: <https://www.clinisciences.com>



Norway

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1,
Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: norge@clinisciences.com
Web: <https://www.clinisciences.com>



Poland

Company: CliniSciences sp.Z.o.o.
Address: ul. Rotmistrza Witolda Pileckiego 67
lok. 200 - 02-781 Warszawa -Poland
Telephone: +48 22 307 0535
Fax: +48 22 307 0532
Email: polska@clinisciences.com
Web: <https://www.clinisciences.com>



Portugal

Company: Quimigen Unipessoal LDA
Address: Rua Almada Negreiros, Lote 5, Loja 14,
2615-275 Alverca Do Ribatejo - Portugal
Telephone: +351 30 8808 050
Fax: +351 30 8808 052
Email: info@quimigen.com
Web: <https://www.quimigen.pt>



Spain

Company: CliniSciences Lab Solutions
Address: C/ Hermanos del Moral 13
(Bajo E), 28019, Madrid - Spain
Telephone: +34 91 269 40 65
Fax: +34 91 269 40 74
Email: espana@clinisciences.com
Web: <https://www.clinisciences.com>



Sweden

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1,
Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: sverige@clinisciences.com
Web: <https://www.clinisciences.com>



Switzerland

Company: CliniSciences Limited
Address: Marktgasse 18 8302 Kloten -
Switzerland
Telephone: +41 (044) 805 76 81
Fax: +41 (044) 805 76 75
Email: switzerland@clinisciences.com
Web: <https://www.clinisciences.com>



UK

Company: CliniSciences Limited
Address: 11 Progress Business center, Whittle
Parkway, SL1 6DQ Slough- United Kingdom
Telephone: +44 (0)1753 866 511
or +44 (0) 330 684 0982
Fax: +44 (0)1753 208 899
Email: uk@clinisciences.com
Web: <https://www.clinisciences.com>



USA

Company: Biotrend Chemicals LLC
Address: c/o Carr Riggs Ingram,
500 Grand Boulevard, Suite 210 Miramar
Beach, FL 32550- USA
Telephone: +1 850 650 7790
Fax: +1 850 650 4383
Email: info@biotrend-usa.com
Web: <https://www.biotrend-usa.com>

