

## Xeno-free Serum Substitute, Safe, Consistent, Cost-Effective

AventaCell BioMedical has adopted a state-of-the-art gamma irradiation process, as a pathogen reduction treatment (PRT), for viral inactivation to create an 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**
- Non-xenogeneic serum substitute
- Abundant natural growth factors and proteins
- Gamma irradiation has been accepted by regulatory agencies as a PRT
- GI safeguard of 99.99%+ viral clearance
- Viral inactivated products w/o loss of potency
- Ideal for producing clinical grade immune cells

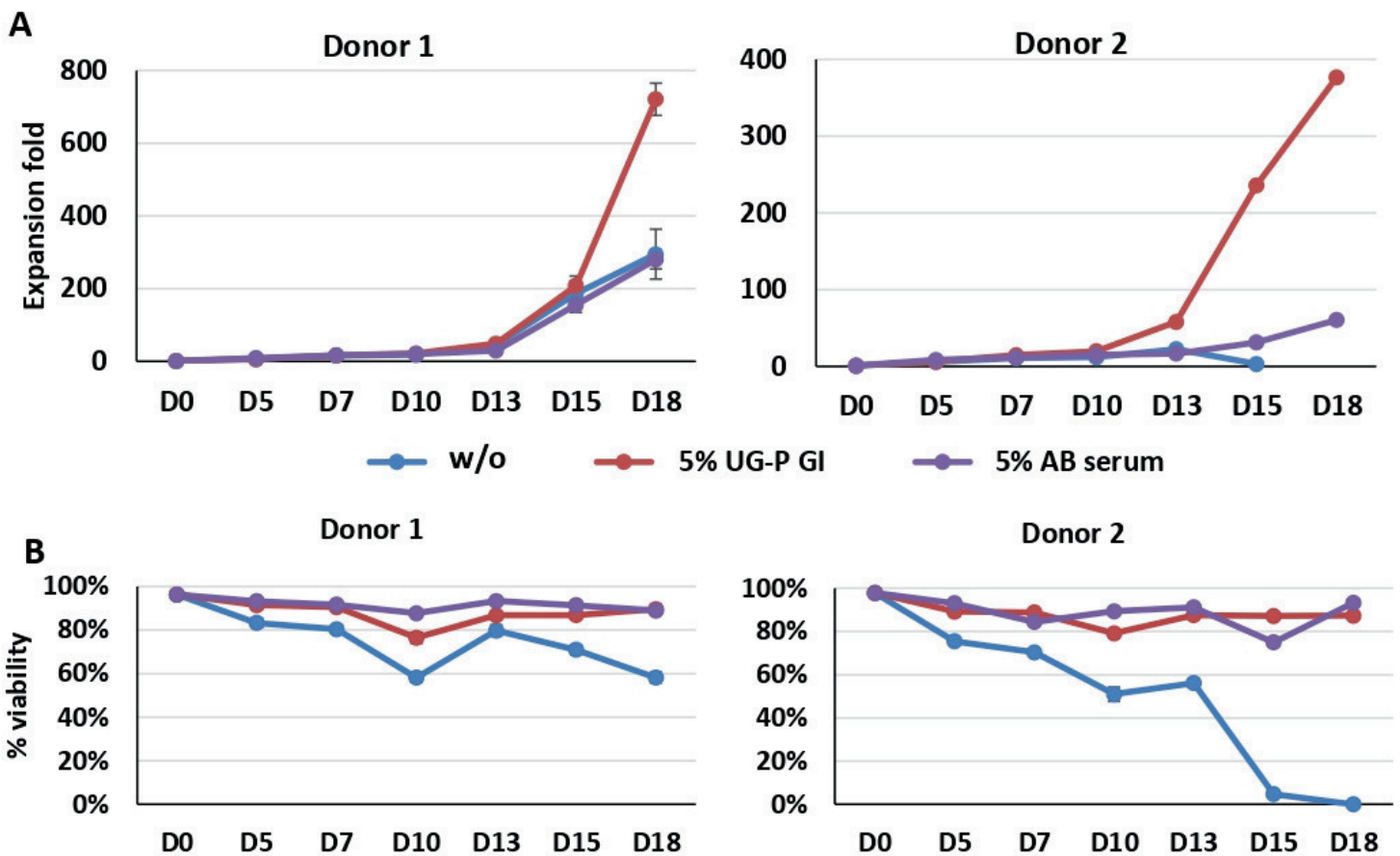


Figure 1. T cell expanded from PBMC in medium (supplier B) supplemented with gamma-irradiated human platelet lysate or autologous plasma. (A) Total cell fold expansion (B) Percentage of live cells.

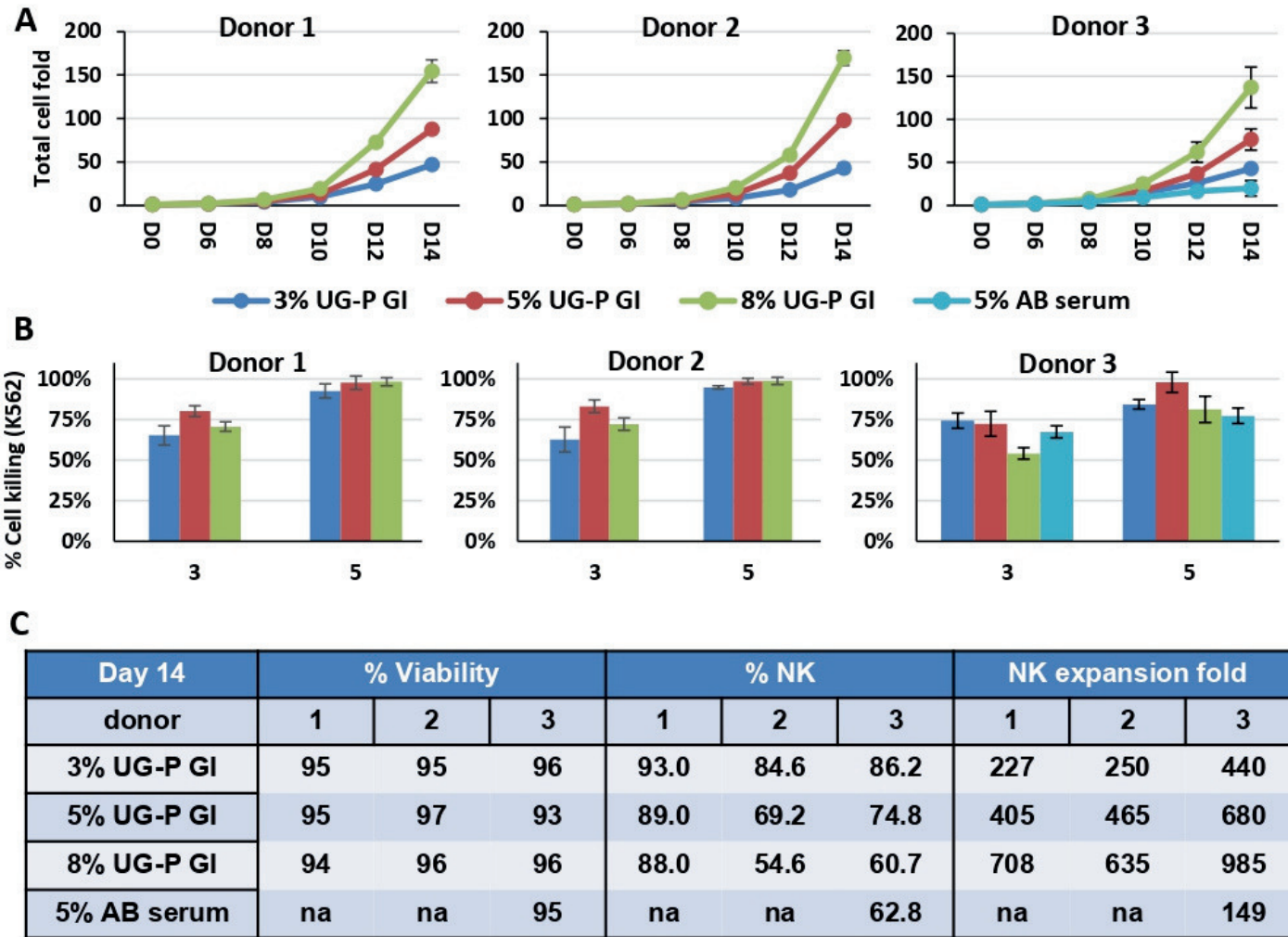


Figure 2. NK cell expanded from PBMC in medium (supplier C) supplemented with gamma-irradiated human platelet lysate (UG-P GI) or AB serum. (A) Total cell fold expansion. (B) Cytotoxicity of NK cells against K562 cells at 3:1, 5:1 of effector : target ratios. (C) Percentage of live cells, percentage of NK cells, specific expansion fold of NK cells.

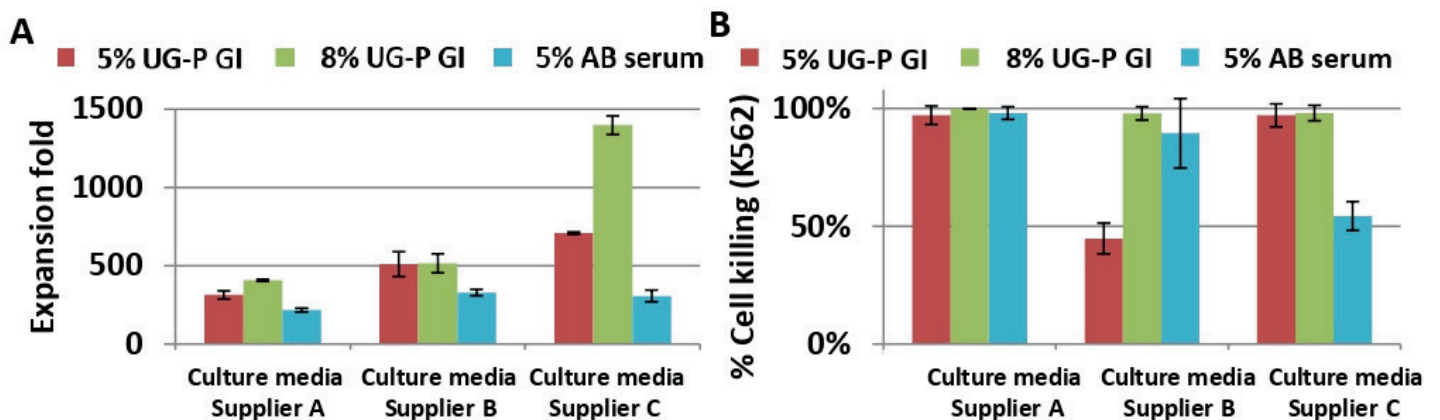


Figure 3. Expansion of NK cell line (NK-92) in various cell culture media with IL-2 (200U/mL) and different supplements. After 12 days in culture, expanded cells were analyzed for (A) Expansion fold of NK cells (B) Cytotoxicity of NK cells against K562 cells at 5:1 of effector : target ratio.

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