

# KBM 551 (Medium for Activation and Expansion Culture of Human T Cells)



### Usage

This medium was developed to support the growth of T cells activated with immobilized anti-CD3 antibody.

### Feature

The addition of interleukin-2 is necessary for the culture.

- The medium is composed of injection solvent and many pharmaceutical grade high purity reagent.
- This medium does not contain proteins except for human serum albumin (pharmaceutical grade), recombinant human insulin.
- Capable of minimize the variation of pH by enhanced buffer capacity.
- Kanamycin sulfate is contained as antibiotic.
- The medium has good keeping quality.

### Usage Example

1. This medium is optimized for activation and expansion culture of human T cells activated with immobilized anti-CD3 antibody.
2. Add 5-10% autoserum or autoplasm at the onset of culture and necessary quantity of human interleukin-2.
3. Upon cell proliferation, add autoserum (autoplasm) and medium culture which includes interleukin-2, scale up the culture. There would be a case to skip adding autoserum (autoplasm) this time.

Osmolality:  $295 \pm 10$  mOsm/kg H<sub>2</sub>O (determined by freezing point depression osmometry)

pH:  $7.2 \pm 0.2$  (determined using a glass electrode)

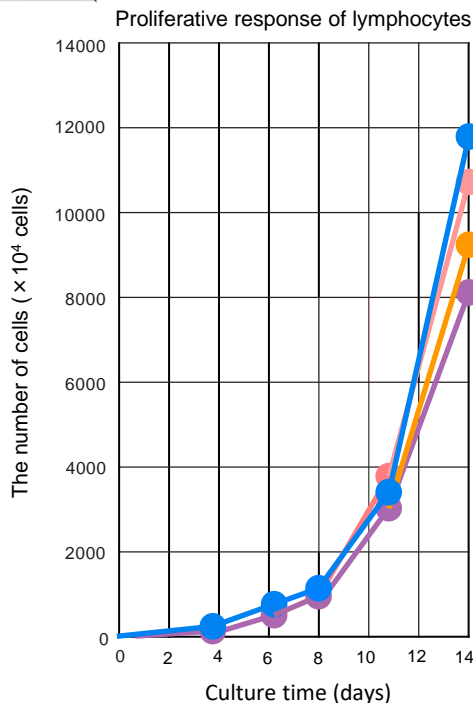
Sterilization: Negative (Membrane filtration)

Mycoplasma Test: Negative (PCR detection)

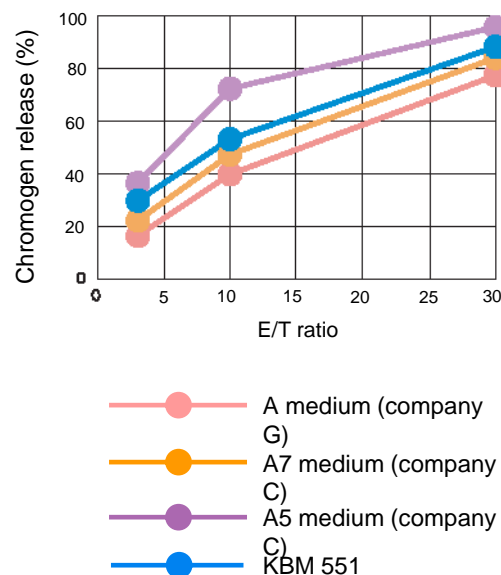
Endotoxin Test: Less than 0.3 EU/mL (Determined by *Limulus* amoebocyte lysate assay)

Notice: This product is only for research use, and not for human or animal therapeutic use.

### Cell Culture Example



**Cytotoxicity of activated lymphocytes to K562 cells**



### Performance evaluation of KBM551:

**Vessel:** 12-well plate on which anti-human-CD3 antibody is immobilized.

**Cell:** Normal human peripheral blood monocytes

**Cytokine:** Recombinant human interleukin-2 (175 IU/mL) was added.

**Plasma:** 5% inactivated autoplasm was added at the onset of culture.

**Proliferative test:** The culture was started at a seeding density of  $6 \times 10^5$  cells/mL, under static conditions at 37°C, 5% CO<sub>2</sub>. Upon cell proliferation, the culture was diluted by adding each medium containing the cytokine without plasma.

**Analysis:** At day 14, the cytotoxicity to K562 cells were measured with TeraScan that is a microfluorocytometer developed for measuring cytotoxicity.

**Code:** 16025510  
**Product Name:** KBM 551  
**Form:** Liquid  
**Size:** 1,000 mL  
**Storage:** 2-8°C  
**Shelf Life:** 8 months from production date