

**DESCRIPTION**

**Summary** Custom TruCytes™ synthetic cells are lyophilized cell mimics that feature selected biomarkers for use in CAR-T potency assays. This product contains no bio-hazardous material, so it is safe to use in any environment and requires no special disposal.  
**For Research Use Only. Not for use in diagnostic or therapeutic procedures.**

**PRODUCT DETAILS**

**Materials** TruCytes™ are hydrogels that are in lyophilized form  
**Handling and Safety** This product contains no bio-hazardous material, so it is safe to use in any environment and requires no special disposal.  
**Shipping condition** The product is shipped on ice.  
**Storage** Store lyophilized products at -20°C upon receipt.  
 The product is recommended to be used immediately upon reconstitution.  
**Expiration** 1 year from the date of manufacturing in lyophilized form  
**Concentration** 2M particles/vial  
**Product Format** Sealed glass vials  
**QC** IFN $\gamma$  release from CAR-T

**PREPARATION**

**Reconstitution** Reconstitute in desired buffer or media for experiment.

**General Instructions for Use**

1. Tap down the vial to ensure that all cell mimics are collected at the bottom of the vial.
2. Add 1000  $\mu$ L of media to the vial and transfer contents to 15mL conical tube. Add additional 1000  $\mu$ L of media to vial, incubate 30 seconds to one minute, and transfer to same 15mL conical tube.
  - a. Note: Multiple vials can be combined into one 15mL conical.
3. Pellet cell mimics at 3000xg 3 mins at room temperature. Carefully remove supernatant from 15 mL tube with 1000  $\mu$ L pipette, or aspirate if mimic pellet is easily identifiable.
4. Resuspend pellet in 1000  $\mu$ L media per starting vial and repeat step 3.
5. Resuspend pellet in 1000  $\mu$ L media. Remove sample and count particles using a flow cytometer, hemacytometer, or automated counting instrument that incorporates phase contrast imaging to identify cells.
  - a. Note: If counts are performed on automated cell counter instrument with trypan blue exclusion, use total cell count. Automated cell counter instruments that rely exclusively on dye-based detection will require alternate methodology. Please reach out to Slingshot Biosciences (info@slingshotbio.com) for instrument-specific protocols or to discuss alternative options or custom solutions.
6. Pellet remaining sample as in (3), carefully remove supernatant, and resuspend mimics at desired concentration for assay.

DATA

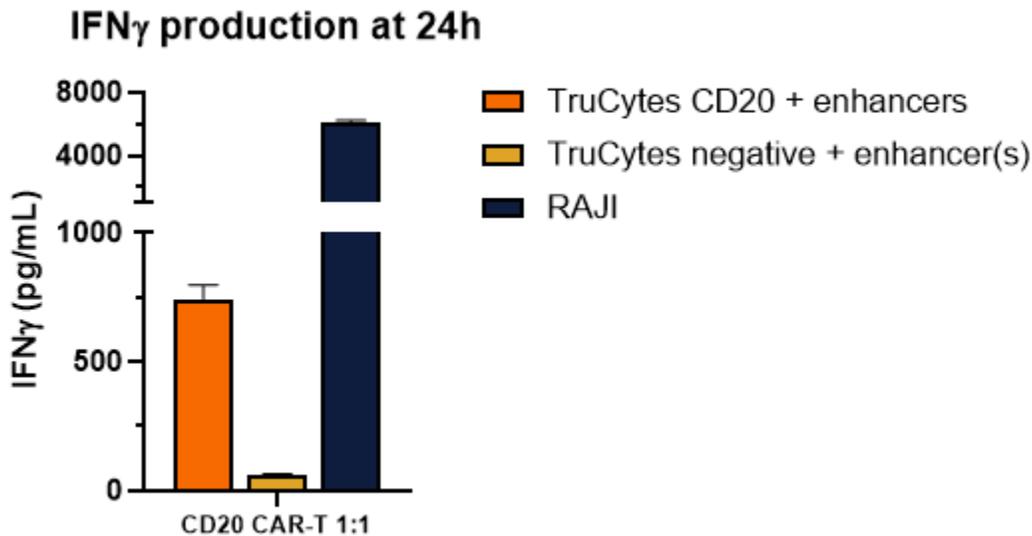


Figure 1. **Specific activation of CD20 CAR-T.** CD20 CAR-T (BPS Biosciences) were cultured at 1:1 E:T with TruCytes Potency negative with enhancer(s) (SL-00045, lot 102728), CD20 + enhancer(s) (SL-00044, lot 102727), or Raji cell line. Cultures were performed in U-bottom plates with RPMI 1640-based media supplemented with 10% FBS and other additives. Supernatant collected after 24 hours of culture was quantified for IFN $\gamma$  with BD CBA on Cytex Aurora.

For technical support from our Cell Therapy scientists, please contact [info@slingshotbio.com](mailto:info@slingshotbio.com)

Individual results may vary. Slingshot Biosciences Cell Therapy scientists are available for technical support and suggestions for customization to achieve optimal results.