

**Tribo™ MSC Prime Medium (TBS8022)**

**Product Overview**

Expansion of mesenchymal stem cells (MSCs) in serum-free media such as MSC Medium is a critical step towards clinical application. However, isolation of primary MSCs from human tissues in serum-free media suffers from low efficiency due to a lack of cell adhesion proteins. **MSC Prime** is developed to resolve this deficiency. **MSC Prime** is serum-free (no human or animal serum added) and chemically-defined (all ingredients are either purified or recombinant) for primary MSC isolation:

1. Increase plating efficiency of primary MSCs
2. Result in more homogeneous and morphologically-desirable MSCs
3. Better lot-to-lot consistency than serum or other undefined supplements.

**Package size and storage**

**MSC Prime** is a concentrated solution (25 X) and shipped in three package sizes frozen:

	<b>Catalog #</b>	<b>Size (25 X)</b>	<b>Diluted Volume</b>
<b>MSC Prime</b>	TBS8022-01	1 mL	25 mL
	TBS8022-05	5 mL	125 mL
	TBS8022-25	25 mL	625 mL

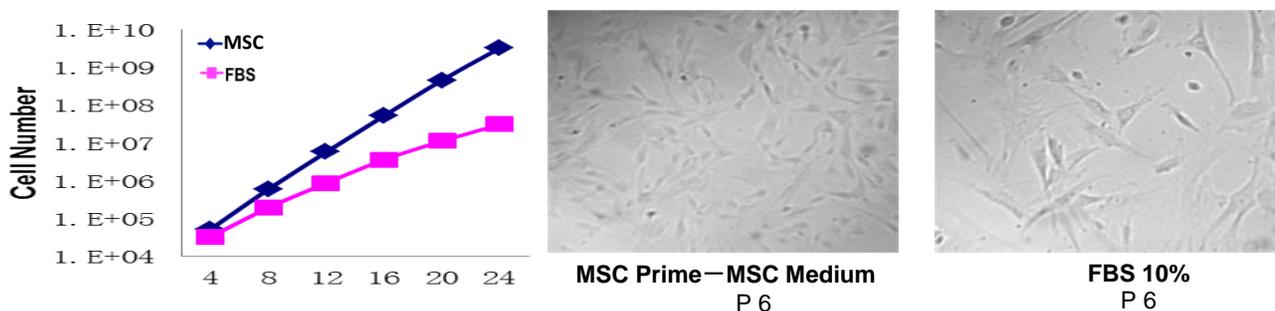
- **Storage and Shelf life:** **MSC Prime** can be stored at -80°C for 6 months. Diluted **MSC Prime** can be stored at 2 to 8°C for 2 weeks.
- **Avoid freeze and thaw.**

**Application Instruction**

1. Prior to use, thaw MSCprime® at 2 to 8°C overnight.
2. Add primary cell isolate containing MSCs (e.g., MNC layer of bone marrow aspirate) into 10X volume of MSC Medium (TBS8021), spin cells down at 1500 rpm for 10 min.
3. During cell spinning, dilute MSC Prime into complete MSC Medium at a ratio of 1:24.
4. Resuspend the cell pellet in the diluted MSC Prime / MSC Medium and transfer into a CellBIND® tissue culture flask. Place the flask in 37°C, 5% CO2 incubator.
5. Change medium to MSC Medium in 2 to 6 days. The optimal time of the medium change to MSC Medium may vary between tissue types. We have successfully isolated MSCs from bone marrow after 2 days and umbilical cord after 6 days in MSC Prime /MSC Medium. The appearance of MSC-like colonies can be used as a guide

**Expected Results:**

**MSC Prime:** Isolated homogeneous/smaller MSCs subsequently expanded in **MSC Medium**:



**Fig. 2.** MSCs isolated by **MSC Prime** expand faster in **MSC Medium** with more desirable morphology than in **FBS**.

**For research use only. Not intended for human diagnostic or therapeutic uses.**