# Support For Cell Culture OYC Research Reagents



# rhTGF-β1

# Recombinant Human Transforming Growth Factor-\$1

Transforming growth factor (TGF)- $\beta$ 1 was known as a suppressive factor of epithelial cells. Moreover, TGF- $\beta$ 1 has multiple functions such as induction of tissue fibrosis, EMT (epithelial –mesenchymal transition), chondrogenesis, and regulation of pluripotency. TGF- $\beta$ 1 is secreted from producer cells as latent, and transformed to active form.

### **Specifications**

#### Recombinant Human TGF-B1

Host : HEK293 Origin : Human

Molecular mass : 25 kDa (Homo dimer)

Concentration : ≥0.1 mg/mL (0.1 M Glycine buffer containing 0.5 M NaCl

and 50 mM L-Arginine monohydrochloride (pH3.0))

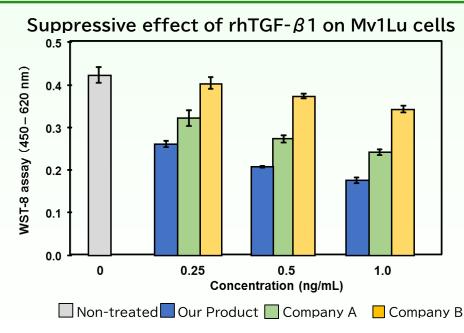
Purity :  $\geq 95\%$  (SDS-PAGE)

Endotoxin level : ≦0.1 EU/μg

Storage : Frozen, below -70°C

\* Avoid freeze and thaw cycles.

\* Every manufacturing lot is checked for their quality in terms of the above items.

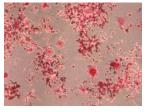


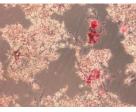
Mv1Lu cells (1x10<sup>4</sup>) were seeded in 96-well plate and cultured with medium containing rhTGF- $\beta$ 1 (0.5 or 1 or 2 ng/mL) for 48 - 72 hours. Proliferative response was detected by WST-8 assay.



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#### Differentiation of RAW264 and hMSCs by rhTGF-β1





RAW264 cells were seeded in 48-well plate and cultured with 5 nM sRANKL and 50 ng/mL rhTGF- $\beta$ 1 for 5 days.

These cells were stained with TRAP.





hMSCs were seeded in 24-well plate and cultured with chondrocyte differentiation medium containing 10 ng/mL rhTGF-\$1 for 2 weeks. These cells were stained with Alcian blue.

rhTGF-B1

None

Item	Catalog number	Packing size
Recombinant Human TGF- $\beta$ 1	47565000	20 μg

- \* For bulk inquiry, please contact us below.
- \* For research purposes only. Not for therapeutic or diagnostic use.

### Related products —

Item	Catalog number	Packing size
Recombinant Human LIF	47076000	20 μg
Recombinant Human FGF2	47079000	100 μg

### References -

- 1. Fràter-Schröder M, et al. (1986) Biochem Biophys Res Commun. 137(1):295-302.
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- 3. Zavadil J, et al. (2001) Proc Natl Acad Sci U S A. 98(12):6686-91.
- 4. Joyce ME, et al. (1990) J Cell Biol. 110(6): 2195-207.
- 5. James D, et al. (2005) Development132(6):1273-82
- 6. Yamasaki S, et al., (2014) PLoS One. 9(1):e87151.
- 7. Böttinger EP, *et al.*, (1996) Proc Natl Acad Sci; 93(12):5877-82.

#### Please contact the one that best suits your need.

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