

## Recombinant Swine, TGF $\beta$ 1 / Transforming Growth Factor beta 1, Animal Free & Carrier Free

Cat #: C-CYP143

Size: 5 $\mu$ g, 20 $\mu$ g

Shipping: Blue Ice

### Product Overview

Transforming growth factor beta 1 or TGF- $\beta$ 1 is a polypeptide member of the transforming growth factor beta superfamily of cytokines. It is a secreted protein that performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation, and apoptosis. In humans, TGF- $\beta$ 1 is encoded by theTGFB1 gene.

### Product Information

**Source:** *Escherichia Coli*.

**Purity:** >98% as determined by SDS-PAGE. Ni-NTA chromatography.

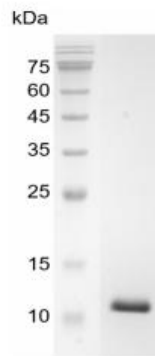
**Biological Activity:** Measure by its ability to inhibit IL-4 -induce proliferation in HT-2 cells. The ED<sub>50</sub> for this effect is < 0.1 ng/mL.

**Endotoxin:** <0.1 EU per 1  $\mu$ g of the protein by the LAL method.

**Amino acid sequence:**

MALDTNYCFSSTEKNCCVRQLYIDFRKDLGWKWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGASAAPCCVPQALEPLPIVY  
YVGRKPKVEQLSNMIVRSCKCS with polyhistidine tag at the C-terminus

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 20 mM sodium citrate, 0.2 M NaCl, pH 4.5.



SDS-PAGE analysis of recombinant swine TGF beta 1

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile 10mM HCl. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.