

# Human TGF-beta 1 Recombinant Protein

## Product Details

Size	10 µg
Species	Human
Published Species	Rat, Human
Expression system	HEK293 cells
Amino acid sequence	Human TGF-beta 1 recombinant protein is a homodimer containing two 112 amino acid subunits
Molecular weight	25 kDa
Class	Recombinant
Type	Protein
Purity	95% by SDS-PAGE
Endotoxin concentration	<0.1 ng/µg
Activity	ED50 < 0.2 ng/mL; determined by the dose-dependent inhibition of mouse HT-2 cells stimulated with mouse IL-4.
Conjugate	Unconjugated
Form	Lyophilized
Purification	sequential chromatography
Storage buffer	100mM acetic acid
Contains	no preservative
Storage conditions	4° C

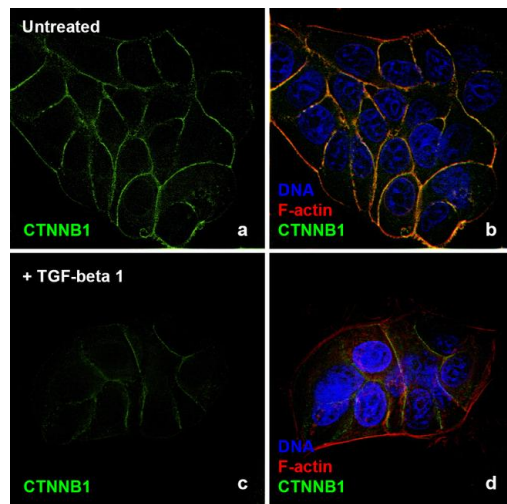
Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-dependent	-
Immunohistochemistry (IHC)	Assay-dependent	-
ELISA (ELISA)	Assay-dependent	-
Functional Assay (FN)	Assay-dependent	5 Publications
Control (Ctrl)	Assay-dependent	-

## Product Specific Information

**Reconstitution:** Centrifuge the vial briefly, before opening to bring the contents to the bottom. Reconstitute the lyophilized protein in an acidic buffer, such as 40 mM acetic acid or 4 mM HCl, to a concentration of 0.1-1.0 mg/mL. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For long term storage, it is recommended to further dilute in buffer containing a carrier protein, such as 0.1% BSA, and store in working aliquots at -20°C to -80°C.

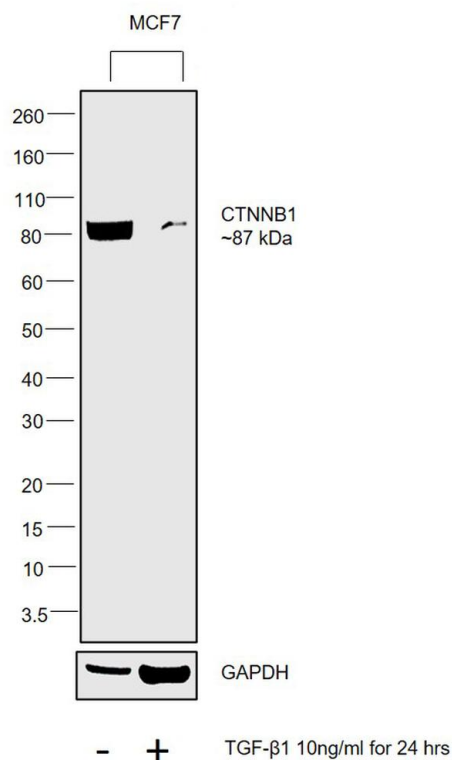
**Storage:** Store the lyophilized protein at 2-8°C or -20°C, preferably desiccated. Store reconstituted human TGF-beta 1 at -20°C (not in a frost-free freezer). Avoid repeated freeze-thaw cycles.

## Product Images For Human TGF-beta 1 Recombinant Protein



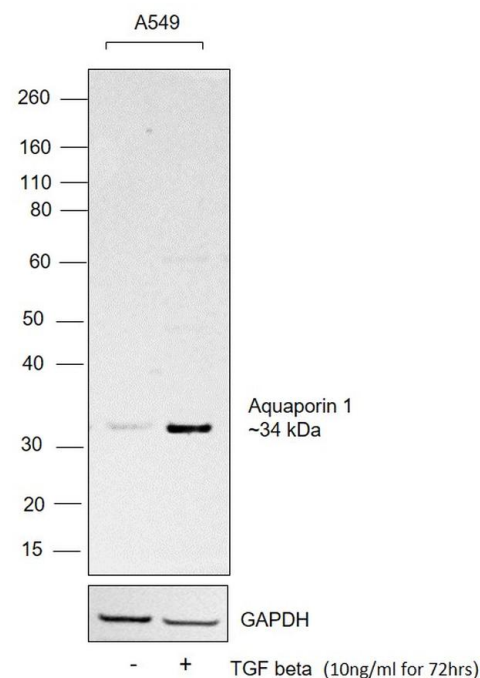
### Human TGF-beta 1 Protein (PHG9214) in FN

Immunofluorescence analysis of catenin beta-1 (CTNNB1) was performed using MCF7 cells treated with 10 ng/mL of human TGF-beta 1 recombinant protein (Product # PHG9214) for 24 hours. The cells were labeled with anti-beta Catenin recombinant rabbit monoclonal antibody (Product # MA5-29202) (Panel a & c; Green). The composite (b & d) represents the merged image with DAPI (blue) and F-actin (red) staining. Cells treated with TGF-beta 1 displayed catenin beta-1 downregulation in comparison with untreated cells. The images were captured at 60X magnification.



### Human TGF-beta 1 Protein (PHG9214) in FN

MCF7 cells were treated with 10 ng/mL human TGF-beta 1 recombinant protein (Product # PHG9214) for 24 hours. Western blot was performed using anti-beta Catenin polyclonal antibody (Product # PA1-37255) and an 87 kDa band corresponding to catenin beta-1 (CTNNB1) was observed to be downregulated upon TGF-beta 1 treatment. GAPDH was used as a loading control.



## Human TGF-beta 1 Protein (PHG9214) in FN

A549 cells were treated with 10 ng/mL human TGF-beta 1 recombinant protein (Product # PHG9214) for 72 hours. A western blot was performed using anti-aquaporin 1 polyclonal antibody (Product # PA5-53954) and a 34 kDa band corresponding to aquaporin 1 was observed to be upregulated upon treatment with TGF-beta 1. GAPDH was used as a loading control.

## 5 References

### Functional Assay (5)

Stem cells (Dayton, Ohio)

#### Spatiotemporal extracellular matrix modeling for in situ cell niche studies.

Authors: Olesen K,Rodin S,Mak WC,Felldin U,Österholm C,Tilevik A,Grinnemo KH

Year  
2021

Species  
Rat

Dilution  
2 ng/mL

Frontiers in molecular biosciences

#### Molecular Mechanism of Mesenchyme Homeobox 1 in Transforming Growth Factor 1-Induced *P311* Gene Transcription in Fibrosis.

Authors: Wei Z,Han C,Li H,He W,Zhou J,Dong H,Wu Y,Tian Y,Luo G

Year  
2020

Species  
Human

Dilution  
10 ng/mL

[View more FN references on thermofisher.cn](#)

### More applications with references on thermofisher.cn

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