

## Mouse BMP7 protein, His tag (active)

Cat. No. GTX00296-pro

Application	Functional Assay
Species	Mouse

Package  
10 µg

## APPLICATION

## Application Note

BMP7 (Bone morphogenetic protein 7), which belongs to the TGF- $\beta$  superfamily, is a signaling molecule with the ability to promote bone formation. BMP7 has also been implicated in various types of cancer, including breast cancer. It has been reported that BMP7 treatment induced cell growth promotion of MDA-MB-231 breast cancer line. To test the effect of BMP7 on cell proliferation, MDA-MB-231 cells were seeded into triplicate wells of 96-well plates at a density of 2000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of BMP7. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. The dose-effect curve that BMP7 significantly promoted cell proliferation of MDA-MB-231 cells. The ED<sub>50</sub> for this effect is typically 3.483-9.017 ng/ml.

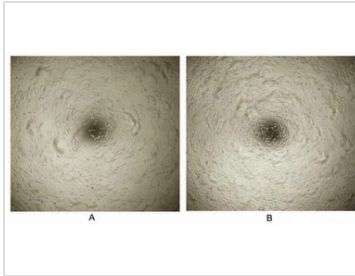
Observed MW 17 kDa.

## PROPERTIES

Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	N-terminal His-Tag; Ser292~His430 (NP_031583.2)
Expression System	E. coli
Purity	> 97%
Endotoxin	< 1 EU/µg
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



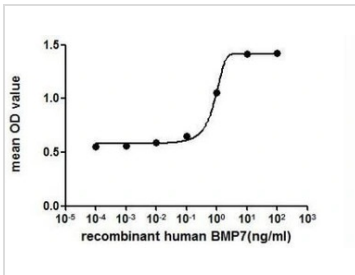
For full product information, images and publications, please visit our [website](#).

**DATA IMAGES**

**GTX00296-pro Functional Assay Image**

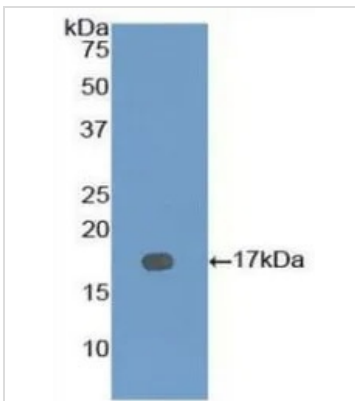
Cell proliferation effect of GTX00296-pro Mouse BMP7 protein (active).

(A) Unstimulated MDA-MB-231 cells cultured in DMEM for 72hrs.

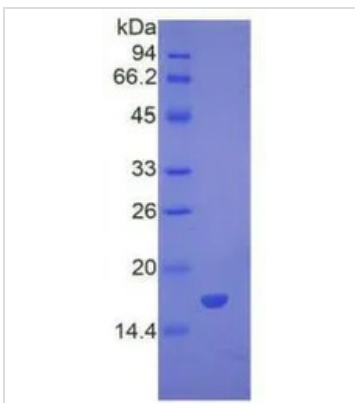
(B) MCF-7 cells cultured in DMEM, stimulated with 10 ng/ml BMP7 for 72hrs.


**GTX00296-pro Functional Assay Image**

The dose effect curve of GTX00296-pro Mouse BMP7 protein (active) on MDA-MB-231 cells. After incubation of Mouse BMP7 protein (active) for 72 hrs, cell proliferation was measured by Cell Counting Kit-8 (CCK-8).


**GTX00296-pro Image**

WB analysis of GTX00296-pro Mouse BMP7 protein (active).


**GTX00296-pro Image**

SDS-PAGE analysis of GTX00296-pro Mouse BMP7 protein (active).



For full product information, images and publications, please visit our [website](http://www.genetex.com).