

Human Prolactin protein, His tag (active)

Cat. No. GTX00069-pro

Applications	Functional Assay	Package 10 µg
Species	Human	13

Applications

Application Note

PRL (prolactin), also known as luteotropin, is a hormone secreted from the pituitary gland and is best known for its role in enabling mammals to produce milk. PRL plays an essential role in metabolism, regulation of the immune system. According to reports, PRL also stimulates proliferation of certain cells, including MCF-7. Thus, proliferation assay of PRL was conducted using MCF-7 cells. Briefly, MCF-7 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 PRL. 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. Cell proliferation of MCF-7 cells after stimulated with PRL And PRL significantly promoted cell proliferation of MCF-7 cells. The ED₅₀ for this effect is typically 3. 709-8. 973 ng/ml

Observed MW (kDa) 24/28 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; Leu29~Cys227 (NP_000939.1)	
Expression System	HEK293 cells	
Purity	> 95%	
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.	



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Date 2025 / 12 / 24 Page 1 of 2

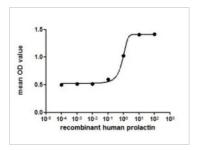
DATA IMAGES



GTX00069-pro Functional Assay Image

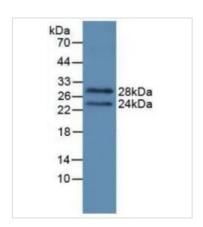
Cell proliferation effect of GTX00069-pro Human Prolactin protein (active). Cell viability was measured by Cell Counting Kit-8 (CCK-8).

- (A) Unstimulated MCF-7 cells cultured in DMEM for 72hrs.
- (B) MCF-7 cells cultured in DMEM, stimulated with 1 ng/ml PRL for 72hrs.



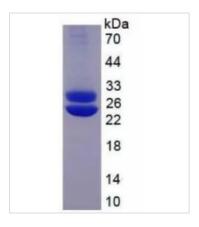
GTX00069-pro Functional Assay Image

The dose effect curve of GTX00069-pro Human Prolactin protein (active) on MCF-7 cells. After incubation of Human Prolactin protein (active) for 72 hrs, cell proliferation was measured by Cell Counting Kit-8 (CCK-8).



GTX00069-pro Image

WB analysis of GTX00069-pro Human Prolactin protein (active).



GTX00069-pro Image

SDS-PAGE analysis of GTX00069-pro Human Prolactin protein (active).



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Date 2025 / 12 / 24 Page 2 of 2