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# Product Datasheet

## Mouse Insulin protein, His tag (active), Unconjugated
## GTX00291-PRO

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| Article Name | Mouse Insulin protein, His tag (active), Unconjugated |
| Biozol Catalog Number | GTX00291-PRO |
| Supplier Catalog Number | GTX00291-pro |
| Alternative Catalog Number | GTX00291-PRO-10 |
| Manufacturer | GeneTex |
| Category | Proteine/Peptide |
| Application | FA |
| Species Reactivity | Mouse |
| Conjugation | Unconjugated |
| NCBI | 16334 |
| UniProt | P01326 |
| 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, ProClin 300. |
| Expression System | E. coli |
| Form | Lyophilized powder |
| Sequence | N-terminal His-Tag, Phe25~Ser54(B)+GGGGS+Gly90~Asn110(A) (NP_001172012.1) |

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| Application Notes | INS (Insulin) is a peptide hormone produced by beta cells of the pancreatic islets, which decreases blood glucose concentration and increases cell permeability to monosaccharides, amino acids and fatty acids. It has been reported that insulin triggers phosphorylation of a number of substrates by binding to its receptors, which was important for cell proliferation, cell cycle progression, cell division and differentiation. To detect the effect of Insulin on cell proliferation, 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 INS. After incubated for 48h, 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 37C. The dose-effect curve showed INS significantly promoted cell proliferation of MCF-7 cells. The ED50 for this effect is typically 11. 71-57. 11 ng/ml. |