

Recombinant Bovine Protein Wnt (WNT3), N-His

Cat. No.: AP4C582

Product Type: Animal Proteins

Size: 10 µg; 50 µg; 200 µg; 1 mg; 5 mg

Product Overview

BioVenic's Recombinant Bovine Protein Wnt (WNT3), N-His is a recombinant protein expressed from *E.coli*. Its predicted molecular weight is 41.4 kDa. The purity is > 90%.

Specifications

Type	Recombinant Protein
Species	Bovine
Expression System	<i>E.coli</i>
Purity	> 90%
Endotoxin	< 1.0 EU/µg
Predicted Molecular Weight	41.4 kDa
Physical State	Lyophilized
Formulation	20 mM Tris, 150 mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Target Information

Bovine Protein Wnt (Protein-Wnt) is a family of secreted glycoproteins that play critical roles in various biological processes, including embryonic development, tissue homeostasis, and cell fate determination. In cattle, Wnt proteins are involved in regulating early embryonic development, blastocyst formation, and adipocyte differentiation. For instance, Wnt11 activates JNK to enhance the competence of embryos to develop to the blastocyst stage. Wnt7A inhibits the PCP pathway, improving blastocyst development without affecting CTNNB1 levels. Additionally, Wnt signaling is essential for intramuscular fat deposition, with Wnt/β-catenin signaling regulating adipogenic differentiation in fibro/adipogenic progenitors (FAPs). In the preimplantation period, Wnt5A, expressed by the endometrium, can increase the percentage of embryos becoming blastocysts through a non-canonical signaling pathway dependent on ROCK activation. These findings highlight the multifaceted roles of Wnt proteins in bovine development and tissue regulation.

Protein	Bovine Protein Wnt (WNT3)
Protein Synonym	WNT3
EC No.	A0AAA9TZ28

Shipping and Storage

This product is shipped with ice packs. Lyophilized protein can be stored at -80°C for 1 year. After reconstitution, the protein solution can be stored at 2-8°C for 2-7 days.

User Note

Always centrifuge tubes before opening. Avoid mixing by vortexing or pipetting. Reconstitute in 20 mM Tris, 150 mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Aliquot the reconstituted solution to minimize freeze-thaw cycles.

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.