

Recombinant Mouse Vinculin (Vcl), N-His

Cat. No.: AP4C841

Product Type: Animal Proteins

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

Product Overview

BioVenic's Recombinant Mouse Vinculin (Vcl), N-His is a recombinant protein expressed from *E.coli*. Its predicted molecular weight is 24.6 kDa. The purity is > 90%.

Specifications

Type	Recombinant Protein
Species	Mouse
Expression System	<i>E.coli</i>
Purity	> 90%
Endotoxin	<1.0 EU per 1µg (determined by the LAL method)
Predicted Molecular Weight	24.6 kDa
Physical State	Lyophilized
Formulation	20 mM Tris, 150 mM NaCl, pH8.0, containing 0.01% SKL, 5% Trehalose.

Target Information

Mouse Vinculin (Vcl) is a crucial cytoplasmic protein involved in cell adhesion, migration, and mechanotransduction. It is a key component of both cell-matrix and cell-cell adhesions, linking the actin cytoskeleton to adhesion receptors such as integrins and cadherins. Vinculin regulates the strength and dynamics of adhesions by binding to actin and stimulating its polymerization. In cell-matrix adhesions, vinculin is essential for generating traction forces during cell migration, particularly in 3D environments. In cell-cell junctions, vinculin stabilizes adherens junctions and is critical for proper embryonic development and cardiac function. Mice lacking vinculin exhibit severe developmental abnormalities and die around embryonic day 10.5.

Protein	Mouse Vinculin (Vcl)
Protein Synonym	Metavinculin
Gene ID	22330
EC No.	Q64727

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.