Recombinant Human Vinculin/VCL protein (His Tag)

Catalog Number: PDEH100977

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

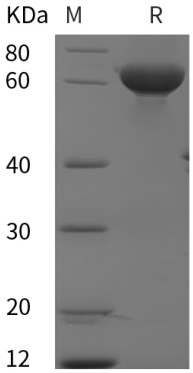
Description

Species	Human
Source	E.coli-derived Human Vinculin protein Met1-Val650, with an N-terminal His & C-terminal His
Calculated MW	71.4 kDa
Observed MW	60 kDa
Accession	P18206
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Vinculin is a focal adhesion and cytoskeletal protein that distributed mainly at cell-cell junctions and cell-extracellular matrix (ECM) adhesion that belongs to the Vinculin/α-Catenin family. Vinculin is an Actin-binding protein and component of the Actin-Linking Functional module that senses and feels the mechanical properties of the extracellular environment. Vinculin is also a key factor that couples, transmits, transduces, and regulates mechanical force between the cytoskeleton and adhesion receptors. Vinculin generally forms two structural states, an open (active) and closed (inactive) state, which are controlled by conformational interaction(s) between the head and tail domains. Vinculin is involved in the mechano-chemical signal transmission of cells by binding to a variety of focal adhesion or cytoskeletal proteins, and plays important roles in cell adhesion, extension, motion, proliferation and survival.