



Recombinant Protein Technical Manual

Recombinant Human Ezrin/EZR Protein

RPES2835

Product Data:

Product SKU: RPES2835

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P15311

Protein Information:

Molecular Mass: 69.4 kDa

AP Molecular Mass: 80 kDa

Tag:

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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 of 10mM HEPES, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Ezrin; Cytovillin; Villin-2; p81; EZR; VIL2

Immunogen Information:

Sequence: Met1-Leu586

Background:

Ezrin is expressed in cerebral cortex, basal ganglia, hippocampus, hypophysis, and optic nerve. The N-terminus of ezrin contains a FERM domain which is further subdivided into three subdomains. The C-terminus contain a ERM domain. As a member of the ERM protein family, Ezrin serves as an intermediate between the plasma membrane and the actin cytoskeleton. It plays a key role in cell surface structure adhesion, migration, and organization. Ezrin probably involved in connections of major cytoskeletal structures to the plasma membrane. The N-terminal FERM domain strongly binds sodium-hydrogen exchanger regulatory factor (NHERF) proteins (involving long-range allostery). The C-terminal binds to actin, phosphatidylinositol bis-phosphate (PIP2) and membrane proteins like CD44 and ICAM-2. In epithelial cells, Ezrin is required for the formation of microvilli and membrane ruffles on the apical pole. Along with PLEKHG6, Ezrin is required for normal macropinocytosis.