



Recombinant Protein Technical Manual

Recombinant Human ILKAP Protein (His Tag)

RPES2073

Product Data:

Product SKU: RPES2073

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: Q9H0C8

Protein Information:

Molecular Mass: 44.3 kDa

AP Molecular Mass: 46 kDa

Tag: C-His

Bio-activity:

Purity: > 92 % as determined by reducing SDS-PAGE.

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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 sterile PBS, pH 7.4

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

Application:

Synonyms: ILKAP2;ILKAP3;PP2C-DELTA

Immunogen Information:

Sequence: Met 1-His 392

Background:

Integrin-linked kinase-associated serine/threonine phosphatase 2C, also known as ILKAP, is cytoplasm protein which belongs to the PP2C family. ILKAP contains one PP2C-like domain. ILKAP is widely expressed. Highest levels expressed in striated muscle. Much lower levels evident in various smooth muscle tissues. ILKAP may play a role in regulation of cell cycle progression via dephosphorylation of its substrates whose appropriate phosphorylation states might be crucial for cell proliferation. ILKAP selectively associates with integrin linked kinase (ILK), to modulate cell adhesion and growth factor signaling. ILKAP inhibits the ILK-GSK3B signaling axis and may play an important role in inhibiting oncogenic transformation. Integrin-linked kinase (ILK) plays key roles in a variety of cell functions, including cell proliferation, adhesion and migration. Within the cell, ILK localizes to multiple sites, including the cytoplasm, focal adhesion complexes that mediate cell adhesion to extracellular substrates, as well as cell-cell junctions in epidermal keratinocytes. Nuclear ILK can be rapidly exported into the cytoplasm through a CRM1-dependent pathway, and its export is enhanced by the type 2C protein phosphatase ILKAP. Nuclear localization of ILK in epidermal keratinocytes is associated with increased DNA synthesis, which is sensitive to inhibition by ILKAP.