Recombinant Protein Technical Manual

Recombinant Human DCAMKL1 Protein

RPES0909

Product Data:

Product SKU: RPES0909

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: O15075

Protein Information:

Molecular Mass: 78.5 kDa

AP Molecular Mass: 64 kDa

Tag:

Bio-activity:

Purity: > 80 % 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℃ 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 sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4

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

Application:

Synonyms: CL1;CLICK1;DCAMKL1;DCDC3A;DCLK

Immunogen Information:

Sequence: Met 1-Val 705

Background:

DCAMKL1, also known as DCLK1, is a member of the protein kinase superfamily and the doublecortin family. It contains two N-terminal doublecortin domains, which bind microtubules and regulate microtubule polymerization, a C-terminal serine/threonine protein kinase domain, which shows substantial homology to Ca2+/calmodulin-dependent protein kinase, and a serine/proline-rich domain in between the doublecortin and the protein kinase domains, which mediates multiple protein-protein interactions. DCAMKL1 is involved in several different cellular processes, including neuronal migration, retrograde transport, neuronal apoptosis and neurogenesis. Its microtubule-polymerizing activity is independent of its protein kinase activity. DCAMKL1 may be involved in a calcium-signaling pathway controlling neuronal migration in the developing brain. It may also participate in functions of the mature nervous system.