Recombinant Human VRK1 Protein

Catalog Number: PKSH031090

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

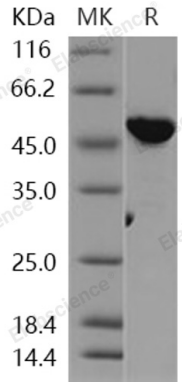
Description

Species	Human
Source	Baculovirus-Insect Cells-derived Human VRK1 protein Met 1-Lys 396
Calculated MW	45.6 kDa
Observed MW	47 kDa
Accession	Q99986
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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 sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

VRK1 is a member of the vaccinia-related kinase (VRK) family of serine/threonine protein kinases. Serine/threonine protein kinases are tumor suppressor that controls the activity of AMP-activated protein kinase family members; thereby playing a role in various processes such as cell metabolism; cell polarity; apoptosis and DNA damage response. VRK1 contains 1 protein kinase domain and localizes to the nucleus. VRK1 gene is widely expressed in human tissues and has increased expression in actively dividing cells; such as those in testis; thymus; fetal liver; and carcinomas. As a serine/threonine kinase; VRK1 phosphorylates 'Thr-18' of p53/TP53 and may thereby prevent the interaction between p53/TP53 and MDM2. Defects in VRK1 are the cause of pontocerebellar hypoplasia type 1 (PCH1); also called pontocerebellar hypoplasia with infantile spinal muscular atrophy or pontocerebellar hypoplasia with anterior horn cell disease. PCH1 is characterized by an abnormally small cerebellum and brainstem; central and peripheral motor dysfunction from birth; gliosis and anterior horn cell degeneration resembling infantile spinal muscular atrophy.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web:www.elabscience.com
Email:techsupport@elabscience.com