Recombinant Human STK10/LOK Protein (His Tag)

Catalog Number: PKSH030352

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

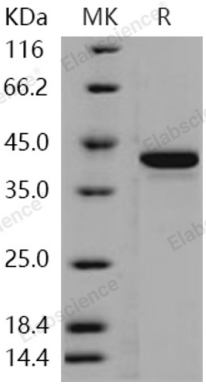
Description

Species	Human
Source	E.coli-derived Human STK10/LOK protein Arg 18-Glu 317, with an N-terminal His
Calculated MW	112 kDa
Observed MW	40 kDa
Accession	NP_005981.3
Bio-activity	The specific activity was determined to be 1353 nmol/min/mg using synthetic AXLtide peptide (KKSRGDYMTMQIG) as substrate.

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	Please contact us for more information.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/ gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as sterile solution of 20 mM Tris, 500 mM NaCl, pH 8.0

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Serine/threonine-protein kinase 10, also known as Lymphocyte-oriented kinase, STK10 and LOK, which belongs to theprotein kinase superfamily, STE Ser/Thr protein kinase family and STE20 subfamily. Protein kinases constitute a large superfamily of enzymes with key regulatory functions in nearly all signal transmission processes of eukaryotic cells. The Ste20 family of serine/threonine kinases plays an important role in numerous cellular functions such as growth, apoptosis, and morphogenesis. STK10 is similar to several known polo-like kinase kinases. It can associate with and phosphorylate polo-like kinase 1, and overexpression of a kinase-dead version of the protein interferes with normal cell cycle progression. STK10 can also negatively regulate interleukin 2 expression in T-cells via the mitogen activated protein kinase kinase 1 pathway. Stk10 can associate with Plk1 in cells and furthermore can phosphorylate Plk1. It can also act on substrates such as myelin basic protein and histone 2A on serine and threonine residues.