Human Pleckstrin / PLEK / p47 Protein (His Tag)

Catalog Number: **14401-H07E**

General Information

Gene Name Synonym:

P47

Protein Construction:

A DNA sequence encoding the mature form of human PLEK (XP_004029394.1) (Met1-Lys350) was expressed with a polyhistide tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: His

Molecular Mass:

The recombinant human PLEK consists of 365 amino acids and predicts a molecular mass of 41.9 KDa. It migrates as an approximately 45 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 10% Glycerol, pH 8.0.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

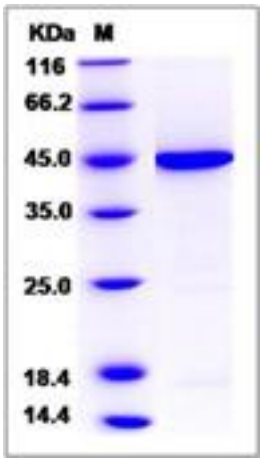
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Pleckstrin is a protein found in platelets. Pleckstrin is the source of the name pleckstrin homology domain. Pleckstrin homology domain (PH domain) is a protein domain of approximately 120 amino acids that occurs in a wide range of proteins involved in intracellular signaling or as constituents of the cytoskeleton. This domain can bind Phosphatidylinositol lipids within biological membranes (such as Phosphatidylinositol (3,4,5)-trisphosphate and phosphatidylinositol (4,5)-bisphosphate), and proteins such as the βγ-subunits of heterotrimeric G proteins, and protein kinase C. Through these interactions, PH domains play a role in recruiting proteins to different membranes, thus targeting them to appropriate cellular compartments or enabling them to interact with other components of the signal transduction pathways.

References

1.Ingley E, *et al.* (1994) Pleckstrin homology (PH) domains in signal transduction. J Cell Biochem. 56(4):436-43. 2.Gibson TJ, *et al.* (1994) PH domain: the first anniversary. Trends Biochem Sci. 19(9):349-53. 3.Haslam RJ, *et al.* (1993) Pleckstrin domain homology. Nature. 363(6427):309-10.