Recombinant Human PIK3C3 Kinase

Catalog No.: RP03432LQ

Sequence Information

Species	Gene ID
Human	5289
Swiss Prot	**Tags**
Q8NEB9	N-His-GST

Synonyms

PIK3C3; PK3C3; VPS34; PI3-kinase type 3; PI3K type 3; PtdIns-3-kinase type 3; Phosphatidylinositol 3-kinase p100 subunit; Phosphoinositide-3-kinase class 3; Phosphatidylinositol 3-kinase catalytic subunit type 3

Product Information

Source	Purification
Baculovirus-Insect Cells	≥ 90 % as determined by SDS-PAGE;≥ 90 % as determined by HPLC.
Calculated MW	**Observed MW**
129.2 kDa	90-130 kDa

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Supplied as a 0.22 μm filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 5% glycerol, 5 mM DTT, 0.1 M trehalose. (pH 7.5). Contact us for customized product form or formulation.

Reconstitution

Please use running water to thaw it quickly.

Background

Phosphatidylinositol 3-kinase catalytic subunit type 3 is an enzyme subunit that in humans is encoded by the PIK3C3 gene. It's a class III phosphoinositide 3-kinase. PI3Ks include class I PI3Ks (PIK3C1), class II PI3Ks (PIK3C2), and PIK3C3. PIK3C1 inhibits autophagy through phosphorylation of the 3-position of the inositol headgroup in phosphatidylinositol (PtdIns) 4,5-bisphosphate in the regulation of the AKT-mTOR pathway. However, PIK3C2 and PIK3C3 mediate the initiation of autophagy by phosphorylating PtdIns to PI3P. PIK3C3-C1 or PIK3C3-C2 is formed by the combination of different regulatory subunits. PIK3C3-C1, which is comprised of the PIK3C3 catalytic subunit and regulator subunits of PIK3R4, BECN1, Atg14, NRBF2, and AMBRA1, is essential for autophagy initiation. The major role of PIK3C3-C2 is to regulate vesicle trafficking and autophagosome formation.

Basic Information

Description

Recombinant Human PIK3C3 Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Gly2-Lys887) of Human PIK3C3 (Accession #Q8NEB9) fused with a N-His-GST tag.

Activity

The activity of PK3C3 is based on the ADP-GLO kinase activity assay quantifies kinase activity by measuring the conversion of ATP to ADP catalyzed by the kinase. Specific reagents are used to convert the ADP in the reaction back to ATP, resulting in the production of a luminescent signal.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -70℃

Operational Notes

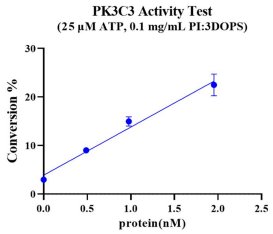
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

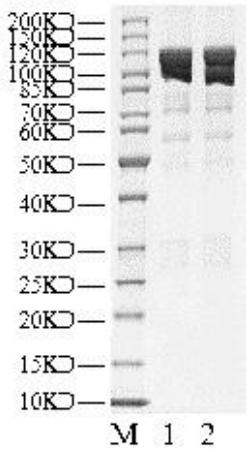
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For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



The activity of PK3C3 is based on the ADP-GLO kinase activity assay quantifies kinase activity by measuring the conversion of ATP to ADP catalyzed by the kinase. Specific reagents are used to convert the ADP in the reaction back to ATP, resulting in the production of a luminescent signal.



Recombinant Human PIK3C3 Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.