Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Recombinant Human PIK3C3 Kinase

Catalog No.: RP03432LQ Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	5289	Q8NEB9

Tags
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.

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

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

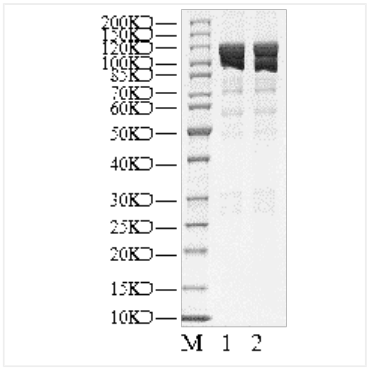
Description
Recombinant Human PIK3C3 Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Gly2-Lys887) of Human PIK3C3 (Accession #Q8NEB9) fused with a N-His-GST tag.

Bio-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.

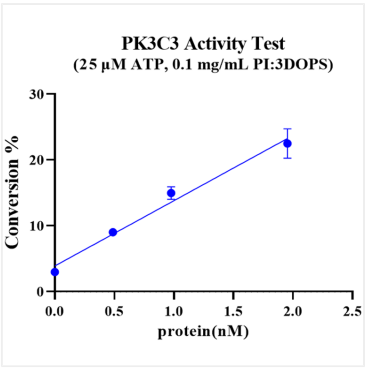
Storage
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.
Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.
Avoid repeated freeze/thaw cycles.

* □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

Validation Data



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



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.