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Product datasheet for RC400349

PI 3 Kinase catalytic subunit alpha (PIK3CA) (NM_006218) Human Mutant ORF Clone

Product data:

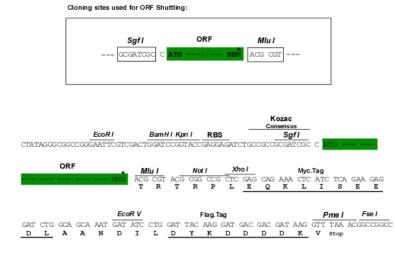
Product Name:Pi 3 Kinase catalytic subunit alpha (PIK3CA) (NM_006218) Human Mutant ORF CloneMutation Description:E545GAffected Codom#:545Affected NT#:c. 1634Nucleotide Mutation:PiK3CA Mutant (E545G), Myc-DDK-tagged ORF clone of Homo sapiens phosphoinositide-3 kinase, catalytic, alpha polypeptide (PIK3CA) as transfection-ready DNAFffect:MissenseSymbol:Pi 3 Kinase catalytic subunit alphaSynonyms:CLAPO; CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alphaE coli Selection:Konanycin (25 ug/mL)Mammalian Cell Selection:PiCM6-Entry (PS100001)Tag:Myc-DDKACCN:Mu_006218ORF Size:304 bpRestriction Sites:Sgi-MlulKestriction Sites:Sgi-Mlul	Product Type:	Mutant ORF Clones
Affected Codon#:545Affected NT#:c.1634Nucleotide Mutation:PIK3CA Mutant (E545G), Myc-DDK-tagged ORF clone of Homo sapiens phosphoinositide-3- kinase, catalytic, alpha polypeptide (PIK3CA) as transfection-ready DNAEffect:MissenseSymbol:PI 3 Kinase catalytic subunit alphaSynonyms:CLAPO; CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alphaE. coli Selection:Kanamycin (25 ug/mL)Mammalian Cell Selection:NeomycinVector:pCMV6-Entry (PS10001)Tag:MycDDKACN:NM_006218ORF Size:3204 bpSelections:Sigl-Mul	Product Name:	PI 3 Kinase catalytic subunit alpha (PIK3CA) (NM_006218) Human Mutant ORF Clone
Affected NT#:c.1634Nucleotide Mutation:RiK3CA Mutant (E545G), Myc-DDK-tagged ORF clone of Homo sapiens phosphoinositide-3 kinase, catalytic, alpha polypeptide (PIK3CA) as transfection-ready DNAEffect:MissenseSymbol:PI 3 Kinase catalytic subunit alphaSynonyms:CLAPO; CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alphaE. coli Selection:Kanamycin (25 ug/mL)Mammalian CellNeomycinSelection:PCMV6-Entry (PS10001)Tag:Myc06218ACN:Myc06218AGR Size:3204 bpSelections:Sigl-Mul	Mutation Description:	E545G
Nucleotide Mutation:PIK3CA Mutant (E545G), Myc-DDK-tagged ORF clone of Homo sapiens phosphoinositide-3 kinase, catalytic, alpha polypeptide (PIK3CA) as transfection-ready DNAEffect:MissenseSymbol:P1 3 Kinase catalytic subunit alphaSynonyms:CLAPO; CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alphaE. coli Selection:Kanamycin (25 ug/mL)Mammalian Cell Selection:NeomycinVector:pCMV6-Entry (PS10001)Tag:Myc0b218ACCN:My_006218ORF Size:3204 bpSgli-Mlul	Affected Codon#:	545
kinase, catalytic, alpha polypeptide (PIK3CA) as transfection-ready DNAEffect:MissenseSymbol:PI 3 Kinase catalytic subunit alphaSynonyms:CLAPO; CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alphaE. coli Selection:Kanamycin (25 ug/mL)Mammalian Cell Selection:NeomycinVector:pCMV6-Entry (PS100001)Tag:My-ODKACCN:NM_006218ORF Size:3204 bpSgli-Mlul	Affected NT#:	c.1634
Symbol:Pl 3 Kinase catalytic subunit alphaSynonyms:CLAPO; CLOVE; CWS5; MCAP; MCM; p110-alpha; PI3K; PI3K-alphaE. coli Selection:Kanamycin (25 ug/mL)Mammalian Cell Selection:NeomycinVector:pCMV6-Entry (PS100001)Tag:Myc-DDKACCN:NM_006218ORF Size:3204 bpSelection Sites:Sgfl-Mlul	Nucleotide Mutation:	
Synonyms:CLAPO; CLOVE; CWS5; MCAP; MCMTC; p110-alpha; PI3K; PI3K-alphaE. coli Selection:Kanamycin (25 ug/mL)Mammalian Cell Selection:NeomycinVector:pCMV6-Entry (PS100001)Tag:Myc-DDKACCN:NM_006218ORF Size:3204 bpSelection Sites:Sgfl-Mlul	Effect:	Missense
E. coli Selection:Kanamycin (25 ug/mL)Mammalian Cell Selection:NeomycinVector:pCMV6-Entry (PS100001)Tag:Myc-DDKACCN:NM_006218ORF Size:3204 bpRestriction Sites:Sgfl-Mlul	Symbol:	PI 3 Kinase catalytic subunit alpha
Mammalian Cell Selection:NeomycinVector:pCMV6-Entry (PS100001)Tag:Myc-DDKACCN:NM_006218ORF Size:3204 bpRestriction Sites:Sgfl-Mlul	Synonyms:	CLAPO; CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alpha
Selection:Vector:pCMV6-Entry (PS100001)Tag:Myc-DDKACCN:NM_006218ORF Size:3204 bpRestriction Sites:Sgfl-Mlul	E. coli Selection:	Kanamycin (25 ug/mL)
Tag:Myc-DDKACCN:NM_006218ORF Size:3204 bpRestriction Sites:Sgfl-Mlul		Neomycin
ACCN:NM_006218ORF Size:3204 bpRestriction Sites:Sgfl-Mlul	Vector:	pCMV6-Entry (PS100001)
ORF Size:3204 bpRestriction Sites:Sgfl-Mlul	Tag:	Myc-DDK
Restriction Sites: Sgfl-Mlul	ACCN:	NM_006218
	ORF Size:	3204 bp
Restriction Sites: Sgfl-Mlul	Restriction Sites:	Sgfl-Mlul
	Restriction Sites:	Sgfl-Mlul



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Cloning Scheme:



* The last codon before the Stop codon of the ORF

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <u>custsupport@origene.com</u> or by calling 301.340.3188 option 3 for pricing and delivery.
	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
RefSeq:	<u>NP 006209</u>

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3724 bp 3207 bp
5000
5290
3q26.32
PI3K_rbd, PI3_PI4_kinase, PI3Ka, PI3K_C2, PI3K_p85B
Druggable Genome
Acute myeloid leukemia, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Inositol phosphate metabolism, Insulin signaling pathway, Jak-STAT signaling pathway, Leukocyte transendothelial migration, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Phosphatidylinositol signaling system, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway, Type II diabetes mellitus, VEGF signaling pathway
124 kDa
Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. A pseudogene of this gene has been defined on chromosome 22. [provided by RefSeq, Apr 2016]

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