

**HUMAN-PIK3R2(Y464) Blocking Peptide**  
Synthetic peptide  
Catalog # BP21653a**Specification****HUMAN-PIK3R2(Y464) Blocking Peptide - Product Information**Primary Accession [O00459](#)**HUMAN-PIK3R2(Y464) Blocking Peptide - Additional Information****Gene ID** 5296**Other Names**

Phosphatidylinositol 3-kinase regulatory subunit beta, PI3-kinase regulatory subunit beta, PI3K regulatory subunit beta, PtdIns-3-kinase regulatory subunit beta, Phosphatidylinositol 3-kinase 85 kDa regulatory subunit beta, PI3-kinase subunit p85-beta, PtdIns-3-kinase regulatory subunit p85-beta, PIK3R2

**Target/Specificity**

The synthetic peptide sequence is selected from aa 450-470 of HUMAN PIK3R2

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**HUMAN-PIK3R2(Y464) Blocking Peptide - Protein Information****Name** PIK3R2**Function****HUMAN-PIK3R2(Y464) Blocking Peptide - Background**

Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein-tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (PubMed:23604317). Promotes nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin- dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (By similarity).

**HUMAN-PIK3R2(Y464) Blocking Peptide - References**

Volinia S., et al. Oncogene 7:789-793(1992).  
Janssen J.W.G., et al. Oncogene 16:1767-1772(1998).  
Grimwood J., et al. Nature 428:529-535(2004).  
Braunger J., et al. Oncogene 14:2619-2631(1997).  
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#### **HUMAN-PIK3R2(Y464) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)