

#### STK16 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP7241a

## Specification

# STK16 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

## <u>075716</u>

# STK16 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 8576

#### **Other Names**

Serine/threonine-protein kinase 16, Myristoylated and palmitoylated serine/threonine-protein kinase, MPSK, Protein kinase PKL12, TGF-beta-stimulated factor 1, TSF-1, Tyrosine-protein kinase STK16, hPSK, STK16, MPSK1, PKL12, TSF1

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP7241a>AP7241a</a> was selected from the N-term region of human STK16 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

# STK16 Antibody (N-term) Blocking Peptide - Protein Information

## Name STK16

Synonyms MPSK1, PKL12, TSF1

#### Function

Membrane-associated protein kinase that phosphorylates on serine and threonine residues. In vitro substrates include DRG1, ENO1 and EIF4EBP1. Also autophosphorylates. May be involved in secretory vesicle trafficking or intracellular signaling. May have a role in regulating stromal-epithelial interactions that occur during ductal morphogenesis in the mammary gland. May be involved in TGF-beta signaling. Able to autophosphorylate on Tyr residue; it is however unclear whether it has tyrosine-protein kinase toward other proteins.

**Cellular Location** 



Cytoplasm, perinuclear region. Membrane; Lipid-anchor. Note=Associates with Golgi and Golgi-derived vesicles.

Tissue Location

Ubiquitously expressed at very low levels.

## STK16 Antibody (N-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

## STK16 Antibody (N-term) Blocking Peptide - Images

## STK16 Antibody (N-term) Blocking Peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

## STK16 Antibody (N-term) Blocking Peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).Berson, A.E., et al., Biochem. Biophys. Res. Commun. 259(3):533-538 (1999).Ligos, J.M., et al., Biochem. Biophys. Res. Commun. 249(2):380-384 (1998).