

MAK Blocking Peptide (C-term)

Synthetic peptide Catalog # BP20087b

Specification

MAK Blocking Peptide (C-term) - Product Information

Primary Accession P20794

Other Accession <u>P20793</u>, <u>Q04859</u>, <u>NP_005897.1</u>

MAK Blocking Peptide (C-term) - Additional Information

Gene ID 4117

Other Names

Serine/threonine-protein kinase MAK, Male germ cell-associated kinase, MAK

Target/Specificity

The synthetic peptide sequence is selected from aa 610-623 of HUMAN MAK

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.

MAK Blocking Peptide (C-term) - Protein Information

Name MAK

Function

Essential for the regulation of ciliary length and required for the long-term survival of photoreceptors (By similarity). Phosphorylates FZR1 in a cell cycle-dependent manner. Plays a role in the transcriptional coactivation of AR. Could play an important function in spermatogenesis. May play a role in chromosomal stability in prostate cancer cells.

Cellular Location

Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle Midbody. Cell projection, cilium, photoreceptor outer segment. Photoreceptor inner segment. Note=Localized in both the connecting cilia and the outer segment axonemes (By similarity) Localized uniformly in nuclei during interphase, to the mitotic spindle and centrosomes during metaphase and anaphase, and also to midbody at anaphase until telophase.

Tissue Location

Expressed in prostate cancer cell lines at generally higher levels than in normal prostate epithelial



cell lines Isoform 1 is expressed in kidney, testis, lung, trachea, and retina Isoform 2 is retina-specific where it is expressed in rod and cone photoreceptors.

MAK Blocking Peptide (C-term) - Protocols

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

Blocking Peptides

MAK Blocking Peptide (C-term) - Images

MAK Blocking Peptide (C-term) - Background

The product of this gene is a serine/threonine protein kinase related to kinases involved in cell cycle regulation. It is expressed almost exclusively in the testis, primarily in germ cells. Studies of the mouse and rat homologs have localized the kinase to the chromosomes during meiosis in spermatogenesis, specifically to the synaptonemal complex that exists while homologous chromosomes are paired. There is, however, a study of the mouse homolog that has identified high levels of expression in developing sensory epithelia so its function may be more generalized.

MAK Blocking Peptide (C-term) - References

Fu, Z., et al. Mol. Cell. Biol. 26(22):8639-8654(2006) Ma, A.H., et al. Cancer Res. 66(17):8439-8447(2006) Mungall, A.J., et al. Nature 425(6960):805-811(2003) Xia, L., et al. J. Biol. Chem. 277(38):35422-35433(2002) Taketo, M., et al. Genomics 19(2):397-398(1994)