10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAK Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP7542b

Specification

MAK Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P20794

MAK Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 4117

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7542b was selected from the C-term region of human MAK . 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.

MAK Antibody (C-term) Blocking Peptide - 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 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

MAK Antibody (C-term) Blocking Peptide - Images

MAK Antibody (C-term) Blocking Peptide - Background

MAK 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 Antibody (C-term) Blocking Peptide - References

Xia, L., et al., J. Biol. Chem. 277(38):35422-35433 (2002).Taketo, M., et al., Genomics 19(2):397-398 (1994).Jinno, A., et al., Mol. Cell. Biol. 13(7):4146-4156 (1993).Bladt, F., et al., Differentiation 53(2):115-122 (1993).Koji, T., et al., Cell Biochem. Funct. 10(4):273-279 (1992).