

MAK Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20087b

Specification

MAK Antibody (C-term) - Product Information

Application WB,E
Primary Accession P20794

Other Accession <u>P20793</u>, <u>Q04859</u>, <u>NP 005897.1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
70581
595-623

MAK Antibody (C-term) - Additional Information

Gene ID 4117

Other Names

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

Target/Specificity

This MAK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 595-623 amino acids from the C-terminal region of human MAK.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MAK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MAK Antibody (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

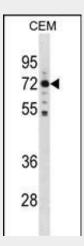
Expressed in prostate cancer cell lines at generally higher levels than in normal prostate epithelial cell lines Isoform 1 is expressed in kidney, testis, lung, trachea, and retina Isoform 2 is retina-specific where it is expressed in rod and cone photoreceptors.

MAK Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

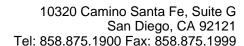
MAK Antibody (C-term) - Images



MAK Antibody (C-term) (Cat. #AP20087b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the MAK antibody detected the MAK protein (arrow).

MAK Antibody (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 Antibody (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)