

Anti-MAK Picoband Antibody

Catalog # ABO12833

Product Information

Application	WB
Primary Accession	P20794
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Serine/threonine-protein kinase MAK(MAK) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4117
Other Names	Serine/threonine-protein kinase MAK, 2.7.11.1, Male germ cell-associated kinase, MAK
Calculated MW	70581
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Midbody. Cell projection, cilium, photoreceptor outer segment . Photoreceptor inner segment. 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 Specificity	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. .
Source	Eukaryota
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human MAK (588-623aa RTYNPTAKNLNIVNRAQPIPSVHGRTDWVAKYGGHR), different from the related mouse and rat sequences by two amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

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.
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Background

Serine/threonine-protein kinase MAK is an enzyme that in humans is encoded by the MAK gene. The product of this gene is a serine/threonine protein kinase related to kinases involved in cell cycle regulation. 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. Mutations in this gene have been associated with ciliary defects resulting in retinitis pigmentosa 62.

Images

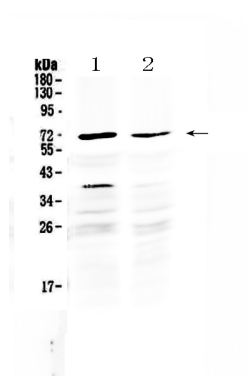


Figure 1. Western blot analysis of MAK using anti-MAK antibody (ABO12833).