

**Anti-MAK Picoband Antibody**  
**Catalog # ABO12833****Specification**

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**Anti-MAK Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P20794</a>
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.

**Anti-MAK Picoband Antibody - 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 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

**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. .

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**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 reconstitution, 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.**

**Anti-MAK Picoband Antibody - 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.

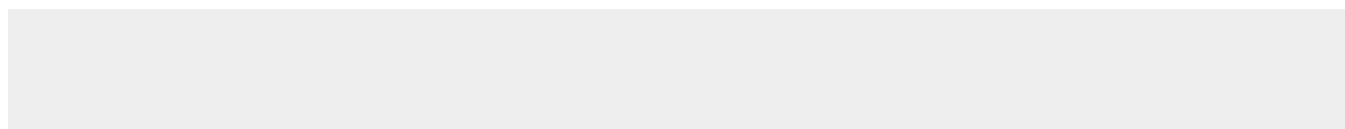
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**Anti-MAK Picoband Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-MAK Picoband Antibody - Images**

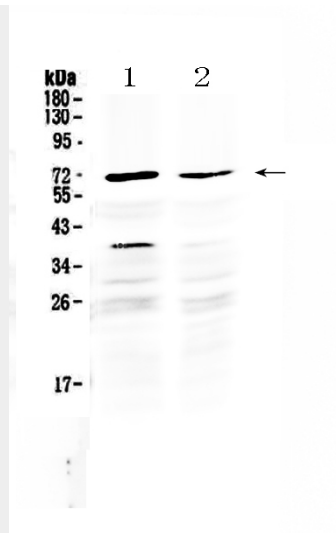


Figure 1. Western blot analysis of MAK using anti-MAK antibody (ABO12833).

#### **Anti-MAK Picoband Antibody - 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.