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

# MOB4A Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7031b

## Product Information

| | |
|---|---|
| **Application** | IF, IHC-P, WB, E |
| **Primary Accession** | Q7L9L4 |
| **Other Accession** | Q8BPB0, Q3T1J9, Q921Y0, Q9H8S9 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Mouse, Rat, Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Calculated MW** | 25091 |
| **Antigen Region** | 177-206 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 92597 |
| **Other Names** | MOB kinase activator 1B, Mob1 homolog 1A, Mob1A, Mob1B, Mps one binder kinase activator-like 1A, MOB1B, MOB4A, MOBKL1A |
| **Target/Specificity** | This MOB4A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 177-206 amino acids from the C-terminal region of human MOB4A. |
| **Dilution** | IF~~1:10~50 IHC-P~~1:100~500 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **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** | MOB4A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | MOB1B ( HGNC:29801) |
| **Synonyms** | MOB4A, MOBKL1A |

| | |
|---|---|
| **Function** | Activator of LATS1/2 in the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS1/2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. Stimulates the kinase activity of STK38L. |
| **Cellular Location** | Cytoplasm. Nucleus |
| **Tissue Location** | Adrenal gland, bone marrow, brain, lung, placenta, prostate, salivary gland, skeletal muscle, testis, thymus, thyroid gland, uterus, colon with mucosa, fetal brain and fetal liver |

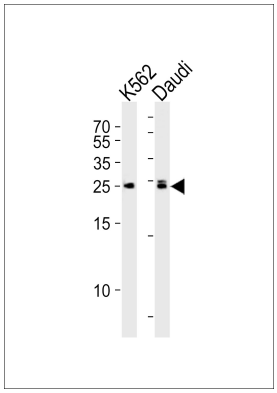
## Background

MOB4A is similar to the yeast Mob1 protein. Yeast Mob1 binds Mps1p, a protein kinase essential for spindle pole body duplication and mitotic checkpoint regulation. Mob4A regulates NDR1 and NDR2 kinase activity, widely expressed nuclear serine-threonine kinases that have been implicated in cell proliferation and/or tumor progression.

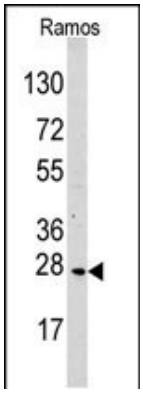
## References

Bichsel,S.J.,J. Biol. Chem. 279 (34), 35228-35235 (2004) Devroe,E.,J. Biol. Chem. 279 (23), 24444-24451 (2004)

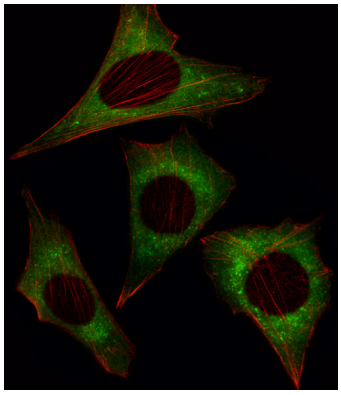
## Images



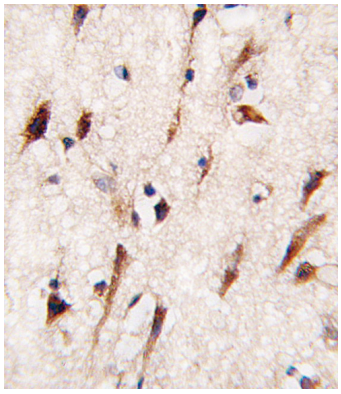

Western blot analysis of lysates from K562, Daudi cell line (from left to right), using MOB4A Antibody (C-term) (Cat. #AP7031b). AP7031b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.




MOB4A Antibody (C-term) (Cat. #AP7031b) western blot analysis in Daudi,K562 cell line lysates (35ug/lane).This demonstrates the MOB4A antibody detected the MOB4A protein (arrow).



Fluorescent image of NIH/3T3 cell stained with MOB4A Antibody (C-term)(Cat#AP7031b).NIH/3T3 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with MOB4A primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).MOB4A immunoreactivity is localized to Cytoplasm significantly.



Formalin-fixed and paraffin-embedded human brain tissue reacted with MOB4A antibody (C-term) (Cat.#AP7031b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## Citations

- Impact of nuclear YAP1 expression in residual cancer after neoadjuvant chemohormonal therapy with docetaxel for high-risk localized prostate cancer
- Mutual dependence of Mob1 and the chromosomal passenger complex for localization during mitosis.
- Cancer susceptibility and embryonic lethality in Mob1a/1b double-mutant mice.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.