

## MOB1B/MOBKL1A Monoclonal Antibody

catalog number: AN200234P

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

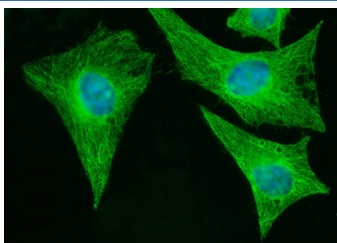
### Description

<b>Reactivity</b>	Human
<b>Immunogen</b>	Recombinant Human MOB1B/MOBKL1A Protein
<b>Host</b>	Mouse
<b>Isotype</b>	IgG2a
<b>Clone</b>	2D8
<b>Purification</b>	Protein A
<b>Buffer</b>	0.2 µm filtered solution in PBS

### Applications Recommended Dilution

<b>ICC/IF</b>	1:20-1:100
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### Data



Immunofluorescence analysis of Human MOBKL1A in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with mouse anti-Human MOBKL1A monoclonal antibody (1:60) at 4°C overnight. Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-mouse IgG secondary antibody(green) and counterstained with DAPI(blue). Positive staining was localized to cytoplasm.

### Preparation & Storage

<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Shipping</b>	Ice bag

### Background

#### For Research Use Only

MST1 and MST2 are the mammalian Ste2-related protein kinases most closely related to Drosophila Hippo, a major regulator of cell proliferation and survival during development. Overexpression of MST1 or MST2 in mammalian cells is proapoptotic. MST1 and MST2 activity increase during mitosis, especially in nocodazole-arrested mitotic cells, where these kinases exhibit an increase in both abundance and activation. MST1 and MST2 also can be activated nonphysiologically by okadaic acid or H<sub>2</sub>O<sub>2</sub>. The MOB1B and MOBKL1B polypeptides, homologs of the Drosophila MATS polypeptide, are identified as preferred MST1/MST2 substrates in vitro and are phosphorylated in cells in an MST1/MST2-dependent manner in mitosis and response to okadaic acid or H<sub>2</sub>O<sub>2</sub>. MST1/MST2-catalyzed MOB1B/MOBKL1B phosphorylation alters the ability of MOB1B/MOBKL1B to bind and regulate downstream targets such as the NDR-family protein kinases. Thus, MOB1B/MOBKL1B phosphorylation in cells promotes MOB1B/MOBKL1B binding to the LATS1 kinase and enables H<sub>2</sub>O<sub>2</sub>-stimulated LATS1 activation loop phosphorylation. Most importantly, the replacement of endogenous MOB1B/MOBKL1B by a non-phosphorylatable mutant is sufficient to accelerate cell proliferation substantially by speeding progression through G1/S as well as mitotic exit.