

# NME2 Rabbit mAb

Catalog # AP76619

## Product Information

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<b>Application</b>	WB, IHC-P
<b>Primary Accession</b>	<a href="#">P22392</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Calculated MW</b>	17298

## Additional Information

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<b>Gene ID</b>	4831
<b>Other Names</b>	NME2
<b>Dilution</b>	WB~~1/500-1/1000 IHC-P~~N/A
<b>Format</b>	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	NME2 ( <a href="#">HGNC:7850</a> )
<b>Function</b>	Catalyzes the transfer of a gamma-phosphoryl group from a nucleoside triphosphate, mainly ATP, to a nucleoside diphosphate via a ping-pong mechanism involving a phosphohistidine intermediate, therefore contributing to the nucleoside triphosphate homeostasis (PubMed: <a href="#">11121025</a> , PubMed: <a href="#">16313181</a> , PubMed: <a href="#">1851158</a> , PubMed: <a href="#">25679041</a> ). Also functions as a histidine protein kinase by transferring the phosphoryl group from the phosphohistidine intermediate to a histidine residue in target proteins (PubMed: <a href="#">17157250</a> , PubMed: <a href="#">20946858</a> ). Phosphorylates the GNB1 subunit of heterotrimeric G proteins at 'His- 266', generating a high-energy phosphate group that promotes GTP formation and enables receptor-independent activation of heterotrimeric G proteins (By similarity). Also phosphorylates KCNN4 at 'His-358', leading to activation of its intermediate conductance calcium-activated potassium channel activity, Ca(2+) influx, and subsequent activation of B and T cells (PubMed: <a href="#">17157250</a> ). Additionally involved in transcriptional regulation through direct DNA binding and chromatin remodeling (PubMed: <a href="#">11121025</a> , PubMed: <a href="#">11694515</a> , PubMed: <a href="#">19033359</a> , PubMed: <a href="#">19435876</a> , PubMed: <a href="#">25679041</a> , PubMed: <a href="#">8392752</a> ). In this context, functions as a single-stranded DNA binding protein that binds and stabilizes

the G-quadruplex (G4) structures within the nuclease hypersensitive element (NHE) III(1) region of the MYC gene promoter, facilitating recruitment of additional single-strand DNA binding proteins and activation of MYC transcription (PubMed:[19033359](#), PubMed:[19435876](#), PubMed:[25679041](#), PubMed:[8392752](#)). G4 DNA-binding activity is independent of its nucleoside diphosphate kinase function and recognizes both folded and unfolded G4 structures (PubMed:[25679041](#)). With NME1, may regulate acetyl-CoA (AcCoA) usage between histone acetylation and fatty acid synthesis by targeting AcCoA release at ATP-rich, HAT-associated chromatin regions (By similarity). Also negatively regulates Rho activity by interacting with AKAP13/LBC (PubMed:[15249197](#)).

#### Cellular Location

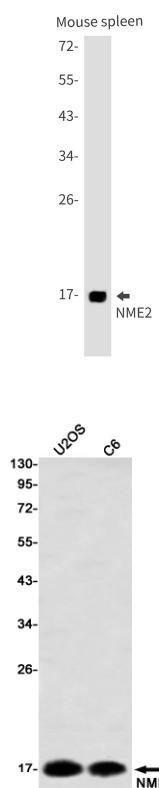
Cytoplasm. Nucleus. Cell projection, lamellipodium. Cell projection, ruffle. Note=Colocalizes with ITGB1 and ITGB1BP1 at the edge or peripheral ruffles and lamellipodia during the early stages of cell spreading on fibronectin or collagen but not on vitronectin or laminin substrates [Isoform 3]: Cytoplasm. Cytoplasm, perinuclear region. Nucleus

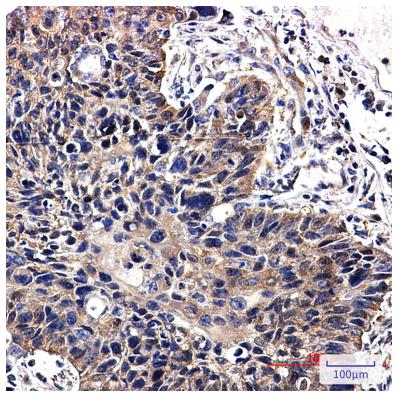
#### Tissue Location

[Isoform 1]: Ubiquitously expressed.

## Images

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