

# Anti-Na<sup>+</sup>/K<sup>+</sup> ATPase $\beta$ 3 (Extracellular) Antibody

Catalog # AN1855

## Product Information

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Application	WB, ICC, IP
Primary Accession	<a href="#">P54709</a>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG2a
Clone Names	M025
Calculated MW	31513

## Additional Information

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Gene ID	483
Other Names	Sodium/potassium-transporting ATPase subunit beta-3, ATPB-3, CD298, ATP1B3
Dilution	WB~~1:1000 ICC~~N/A IP~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Na <sup>+</sup> /K <sup>+</sup> ATPase $\beta$ 3 (Extracellular) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

## Background

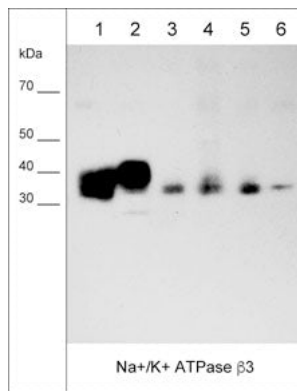
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The Na<sup>+</sup>/K<sup>+</sup> ATPase is an integral membrane heterodimer belonging to the P-type ATPase family. This ion channel uses the energy derived from ATP hydrolysis to maintain membrane potential by driving Na<sup>+</sup> export and K<sup>+</sup> import across the plasma membrane. It is composed of a large catalytic  $\alpha$  subunit and a membrane-spanning auxiliary  $\beta$  subunit. In humans, the Na<sup>+</sup>/K<sup>+</sup> ATPase is a binary complex of an  $\alpha$  subunit that has four isoforms ( $\alpha$ 1- $\alpha$ 4) and a  $\beta$ -subunit that has three isoforms ( $\beta$ 1,  $\beta$ 2,  $\beta$ 3). Na<sup>+</sup>/K<sup>+</sup> ATPase subunit expression has been shown to be upregulated in cancers, and inhibition of Na<sup>+</sup>/K<sup>+</sup> ATPase activity has anti-cancer effects. The  $\beta$ 3 subunit of Na<sup>+</sup>/K<sup>+</sup> ATPase has increased expression in human gastric cancer tissues and cell lines, and its increased expression level predicts poor patient outcome.  $\beta$ 3 subunit knockdown significantly inhibited cell proliferation, colony-formation ability, migration, and invasion in human gastric carcinoma cell lines.

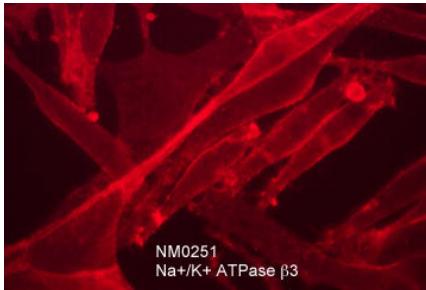
## Images

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Western blot of native human MDA-MB-231 (lane 1), and MeWo (lane 2) cell lysates, as well as native human breast (lane 3), lung (lane 4), skin (lane 5), and brain (lane 6)



tissues. The blot was probed with anti-Na<sup>+</sup>/K<sup>+</sup> ATPase β3 (AN1855) at 1:1000.



Immunocytochemical labeling of Na<sup>+</sup>/K<sup>+</sup> ATPase β3 in paraformaldehyde fixed human MeWo melanoma cells. The cells were labeled with mouse monoclonal anti-Na<sup>+</sup>/K<sup>+</sup> ATPase β3 (clone M025). The antibody was detected using goat anti-mouse Ig DyLight® 594.

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