

# Anti-Na+/K+ ATPase β3 (Extracellular) Antibody

Catalog # AN1855

Specification

# Anti-Na+/K+ ATPase β3 (Extracellular) Antibody - Product Information

Application	WB, IHC
Primary Accession	<u>P54709</u>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG2a
Calculated MW	21512
Calculated MW	31513

### Anti-Na+/K+ ATPase β3 (Extracellular) Antibody - Additional Information

Gene ID 483 Other Names Sodium/potassium-transporting ATPase subunit beta-3, ATPB-3, CD298, ATP1B3

**Dilution** WB~~1:1000 IHC~~1:100~500

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+/K+ ATPase  $\beta$ 3 (Extracellular) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

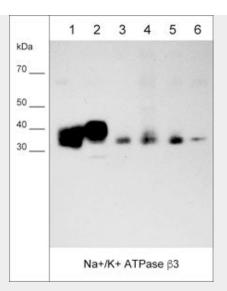
Shipping Blue Ice

### Anti-Na+/K+ ATPase β3 (Extracellular) Antibody - Protocols

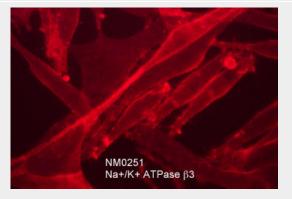
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Na+/K+ ATPase β3 (Extracellular) Antibody - Images



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+/K+ ATPase  $\beta$ 3 (NM0251) at 1:1000.



Immunocytochemical labeling of Na+/K+ ATPase  $\beta$ 3 in paraformaldehyde fixed human MeWo melanoma cells. The cells were labeled with mouse monoclonal anti-Na+/K+ ATPase  $\beta$ 3 (clone M025). The antibody was detected using goat anti-mouse Ig DyLight® 594.

## Anti-Na+/K+ ATPase β3 (Extracellular) Antibody - Background

The Na+/K+ 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+ export and K+ 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+/K+ 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+/K+ ATPase subunit expression has been shown to be upregulated in cancers, and inhibition of Na+/K+ ATPase activity has anti-cancer effects. The  $\beta$ 3 subunit of Na+/K+ 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.