

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

Catalog # AN1854

Specification

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

Application WB, IHC
Primary Accession P54709
Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
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 β 3 (Extracellular) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

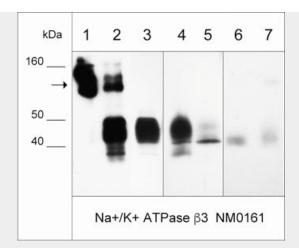
Anti-Na+/K+ ATPase β3 (Extracellular) Antibody - Protocols

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

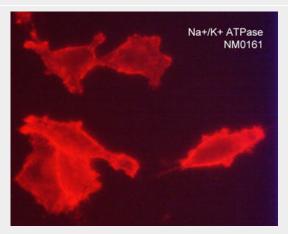
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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





Western blot of NM0161 immunoprecipitates (IP) and whole lysates. The NM0161 antibody only (lane 1), IP from A431 cell lysate (lane 2), A431 cell input (lane 3), LNCaP cells (lane 4), MeWo cells (lane 5), and normal human lung (lane 6) and skin (lane 7). The blot was probed with anti-Na+/K+ ATPase β 3 NM0161 (lanes 1-7). The arrow designates native antibody, while the β 3 subunit migrates around 40 kDa.



Immunocytochemical labeling of Na+/K+ ATPase β 3 in paraformaldehyde fixed human MDA-MB-231 cells. The cells were labeled with mouse monoclonal anti-Na+/K+ ATPase β 3 (clone M016). 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 α subunit and a membrane-spanning auxiliary β subunit. In humans, the Na+/K+ ATPase is a binary complex of an α subunit that has four isoforms (α 1- α 4) and a β -subunit that has three isoforms (β 1, β 2, β 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 β 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. β 3 subunit knockdown significantly inhibited cell proliferation, colony-formation ability, migration, and invasion in human gastric carcinoma cell lines.